

**UNIVERSITY OF CANTERBURY**

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**Male adolescents' perceptions of how they  
interpret and manage their asthma symptoms**

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## **Dedication**

I dedicate this thesis to my grandmother, Margaret Strawbridge. I remember my grandmother as loving, generous, diligent, and resilient woman whom strongly advocated the importance of education. My grandparents (Bill & Margaret), parents (Wendy & Mike), partner (Pam) and the rest of the families' hard work, support, and sacrifice has allowed me the opportunity to further my education and I am forever grateful to them for their generosity.

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## **Abstract**

Asthma is a chronic condition affecting approximately 235 million people worldwide, yet international studies have identified that most adolescents with asthma have poor self-management skills. Asthma is common in adolescent males however only a few studies have specifically investigated the asthma experiences of this population group. The aim of this study was to explore how male adolescents understand and manage their asthma symptoms. A qualitative descriptive study design was selected to investigate the experiences of male adolescents, focusing on their perceptions of societal and masculine influences on their asthma management. Individual semi-structured interviews were undertaken with 15 male adolescents to capture data about their perceptions of masculinity, asthma management, interpersonal relationships, and their physical wellbeing. Findings support previous research illustrating that asthma restricts adolescent male's lives, both at school and recreationally. This study established that these restrictions could unpredictably affect perceived masculine ideals and their ability to be independent, strong, muscular, and competitive. Consequently, the majority of participants felt their masculinity was challenged and described feeling different, isolated, and/or marginalised from their non-asthmatic peers. To counteract these feelings, maintain control, and seek normality in front of peers, most participants reported downplaying their asthma symptoms and/or did not adhere to their prescribed treatment regimes. In addition, hegemonic representations of males as 'tough' and 'self-reliant' influenced most participants to describe reactive, non-help seeking behaviours, and minimisation of their asthma symptoms. However not all participants described adverse outcomes, with a minority resisting hegemonic ideals by taking care of their health and asthma management. Findings illustrate how a variety of masculine ideals influenced young men's health and asthma management. Further research is required to investigate the ways differential masculine ideals may be protective or detrimental to asthma medication.



## Abbreviations

ACC	Accident Compensation Corporation
Co-ed	Co-educational
DTCA	Direct-to-consumer-advertising
EIA	Exercise-induced asthma
MOE	Ministry of Education
PHARMAC	Pharmaceutical Management Agency
QD	Qualitative descriptive
TA	Thematic analysis

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## Definitions

**ACC** – Is a New Zealand Crown entity responsible for administering the country’s universal no-fault accidental injury scheme.

**Compliance** - is defined in this study as an active, intentional, and responsible process in which participants work to maintain their asthma in collaboration with social support (e.g., mothers and doctors; Kyngäs, 1999).

**Pākehā** – Is a Māori language term for New Zealanders who are of European descent.

**PHARMAC** – Is the New Zealand Crown agency that decides, on behalf of District Health Boards, which medicines and related products are subsidised for the use in the community and public hospitals (PHARMAC, 2013).

# **Chapter One:**

## **Introduction**

### **1.1 Background**

Asthma is a common chronic disease in childhood and adolescence worldwide (Bruzzese, Fisher, Lemp, & Warner, 2009; World Health Organisation, 2012). The global asthma report 2011 indicated that asthma affects approximately 235 million people and the prevalence is rising, leading to an estimated 250,000 deaths worldwide annually (International Union Against Tuberculosis and Lung Disease, 2011). The Asthma Foundation (New Zealand), Holt and Beasley (2001) and Shaw (2006) have indicated that New Zealand has one of the highest prevalence rates of asthma in the world. The Asthma Foundation (New Zealand) in 2012 estimated that over 600,000 New Zealanders are affected by asthma with 79 deaths in 2006, 61 in 2007 and 65 in 2008. In addition, New Zealand has some of the highest rates of childhood asthma in the world; approximately one in four children under 15 years are affected by asthma (Holt & Beasley, 2001; The Asthma Foundation, New Zealand, 2013). Shaw (2006) specified that the majority of children with asthma do not have good control of their symptoms and are associated with low long-term preventive medication use. This conclusion was further supported by PHARMAC's (2002) analysis that identified asthma as the most under treated disease group. Poorly controlled asthma symptoms increase the economic burden of asthma through increased hospitalisation rates, lost productivity in the work place, and school student absenteeism (Gibson, Henry, Vimpani, & Halliday, 1995; Holt & Beasley, 2001; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). Subsequently, Holt and Beasley (2001) conservatively estimated the economic cost of asthma in New Zealand at over \$800 million per year. For children, poor asthma management is attributable to the approximated 550,000 school days lost every year due to asthma complications in New Zealand (Liberty, Pattemore, Reid, & Tarren-Sweeney, 2010; Shaw, 2006). For males, asthma is the highest-ranking specific disease in terms of years lost to disability and the third highest in females (Holt & Beasley, 2001). Both international and national statistics have illustrated that asthma is an increasing and prominent chronic illness, with relatively high rates of morbidity in New Zealand (Holt & Beasley, 2001; International Union Against Tuberculosis and Lung Disease, 2011; The Asthma Foundation, New Zealand, 2013). Yet the morbidity and mortality associated with asthma is largely preventable if informed and managed appropriately (Holt & Beasley, 2001). Despite improved treatment options,

medication adherence has been negatively associated within adolescence and subsequently asthma remains a major health issue for many adolescents (Letourneau et al., 2012; McQuaid, Kopel, Klein, & Fritz, 2003; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). Therefore, in the next section I am going to review asthma management in adolescence.

## **1.2 Asthma management in adolescence**

Asthma can significantly affect the daily lives of adolescents (Bruzzese, Fisher, Lemp, & Warner, 2009; Iley, 2007; Nocon, 1991; Randolph & Fraser, 1998; Wildhaber, Carroll, & Brand, 2012). Adolescence is a period of transition from childhood to adulthood, where important physical, cognitive, emotional, and psychosocial changes occur (Couriel, 2003; de Benedictis & Bush, 2007; Gibson, Henry, Vimpani, & Halliday, 1995; Rhee, Wenzel, & Steeves, 2007; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). To accomplish these developmental changes some adolescents seek independence, aim to build and maintain meaningful relationships with others, and acquire skills and master tasks that are important to their peers (Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). However, asthma symptoms can challenge the accomplishment of some of these developmental tasks as asthma can unpredictably limit physical or social activities (Bruzzese, Fisher, Lemp, & Warner, 2009; Letourneau et al., 2012; Kyngäs, 1999; Rhee, Wenzel, & Steeves, 2007). For instance, exercise-induced asthma [EIA] can restrict participation in physical activity through shortness of breath, chest tightness, wheezing or coughing due to narrowing of the airways. This was evident in Wildhaber, Carroll, and Brand's (2012) study of 943 children/adolescents from South Africa, Canada, Greece, Hungary, Netherlands, and the United Kingdom. Their results highlighted that asthma had a considerable impact on the daily lives of many adolescents and almost half of the participants reported that asthma prevented them from participating in physical activity. Inability to participate in physical or social activities can make some adolescents feel apprehensive, frustrated, isolated, different, and excluded from their peers. As any deviation from the norm poses a threat to an adolescent's perception of fitting in with peers, resulting in low self-esteem, peer isolation, school absenteeism, depression, and anger (Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). Consequently some adolescents risk counterproductive self-management behaviours (e.g., downplaying asthma symptoms and non-compliance with prescribed treatment regimens) to maintain their autonomy in public settings (Ayala et al., 2006; Bruzzese, Fisher, Lemp, & Warner, 2009; Randolph & Fraser, 1998; Rhee, Wenzel, & Steeves, 2007; Rydström, Hartman, & Segesten, 2005; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004).

Many adolescents with asthma are at particular risk of mismanagement of their asthma symptoms and medication (Bruzzese, Fisher, Lemp, & Warner, 2009; Kyngäs, 1999; Williams, 2000a), and as adolescents transform from childhood to adulthood they seek increasing responsibility for their asthma management (Letourneau et al., 2012). Yet some adolescents are unable to relate actions with consequences and remain at risk from insufficient knowledge or understanding of their asthma symptoms and treatment (Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). In addition, concerns about normalcy and peer approval can influence some adolescents to deny the severity of their asthmatic condition and to be reluctant to receive external assistance (e.g., consult their doctor) when asthma symptoms persist (Couriel, 2003; Letourneau et al., 2012; Price, 1996; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). Self-responsibility should be encouraged; however, health care providers and parents need to be mindful that social influences can affect some adolescents' judgment to effectively manage their asthma. For example, it is evident within previous research that infrequent and misinformed portrayals of people with asthma depicted in the media can contribute to some adolescents underestimating the seriousness of their asthmatic condition (Ayala et al., 2006; Clark, 2012). Additionally, there is clear evidence to suggest that social influences (e.g., stereotyping and stigma of asthmatics, peer pressure, desiring normality, and peer acceptance) can affect some adolescents' ability to effectively manage their asthma (Bruzzese, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Kyngäs, 1999; Price, 1996). Subsequently, adolescents have been identified as less observant of their prescribed medication regimes in comparison with children (Letourneau et al., 2012; McQuaid, Kopel, Klein, & Fritz, 2003; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004). In summary, research suggests that despite improved treatment options, asthma remains a major health issue for many adolescents, and poorly managed asthma can be detrimental to quality of life, and in rare circumstances can lead to preventable mortality (Rhee, Wenzel, & Steeves, 2007). There are gender differences in asthma compliance and previous studies have provided evidence that males are more likely to minimise the effects of their asthma and are less likely than females to take prescribed medications, disclose their asthma, and treat themselves in public (Iley, 2007; Rhee, Wenzel, & Steeves, 2007; Tollefsen et al., 2007; Williams, 2000a). Subsequently, there is a need to focus on gender and males specifically, thus in the next section, I will review research that addresses men's health and the sociocultural factors associated with men's health management.

### **1.3 The need to go beyond biological sex differences in addressing men's health issues**

International gender-specific research on men's health has only recently begun to be examined, as historically most research on men has not been studied from a gendered perspective (Courtenay, 2011). Literature on men and their health focuses predominantly on the comparison between the health of men and women and the majority of health related research with men has been biological in nature (Creighton & Oliffe, 2010; Lee & Owens, 2002; Mackie, 2005; McKinlay, 2005). For instance, males are considered biologically less robust than females as demonstrated through consistently higher neonatal death rates (Courtenay, 2011; Lee & Owens, 2002). For example, more boys are likely to die from congenital cardiovascular defects at infancy (Courtenay, 2011; Lee & Owens, 2002). Comparisons in mortality rates in infancy can be attributable to biological differences; however, morbidity and mortality differences between men and women that are experienced later in life may have causative factors other than biological differences (McKinlay, 2005; Wilkins, 2010). Contemporary research illustrates that many males have unhealthy dietary habits and are not responsible with sun protection or safety belts, which are factors that also affect the health and longevity of males (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002; Pichon, Corral, Landrine, Mayer, & Norman, 2010). Other behavioural characteristics and non-biological factors (e.g., psychological, social, cultural, economic, environmental, and behavioural) are also important determinants of male mortality and morbidity (Wilkins & Savoye, 2009).

However, the majority of previous international studies on men's health have not considered causative factors beyond the biological differences with women (Mackie, 2005; McKinlay, 2005). Consequently, Lee and Owens (2002) asked the question, "what, other than biology, does it mean to be a man in contemporary society, and how might social and cultural expectations of masculinity affect men's behaviour, their expectations, their relationships, and their physical and emotional health?" (p. 1). National researchers have also recognised the shortage of information investigating sociocultural implications on males' experience of health in the world in which they live (Barwick, 2004; Mackie, 2005; McKinlay, 2005). For example, McKinlay's (2005) literature review of New Zealand men's health stated that factors other than biological difference have a significant effect on men's health. She concluded that there are still unresolved issues around men's health, and that more research is required on all dimensions of men's health. Additionally, Mackie (2005) identified the limited scope of research on men's perceptions of health and argued that sufficient evidence is lacking as to why men behave as they do in relation to their health. In summary, men's health research has rarely investigated the impact of

non-biological factors on men's health or examined men's health through the lens of gender. There is a need to continue gender-specific research given that men and women have different reproductive health needs, variant risks for specific diseases and disabilities, and they differ in their perceptions of health (Courtenay, 2011). These gender differences in health behaviours between men and women have been attributed to constructions of masculinity. Connell (1995) defines masculinity as, "a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality and culture" (p. 71). Masculinity is considered to be the socially constructed gender attributed to the male sex and will be reviewed in the next section.

## **1.4 Constructions of masculinity and its influence on men's health**

Sociologist Raewyn Connell has argued that problems in men's health behaviour and health status are attributable to the role of hegemonic masculinity, which refers to the dominant form of masculinity that exists within a particular culture (Connell, 1987; Lohan, 2010). In Western societies, hegemonic masculinity characterised men as tough, stoic, and emotionally invulnerable (Broom & Tovey, 2009; Cecil, McCaughan, & Parahoo, 2010; Lee & Owens, 2002). Connell (1987) explained that some men succeed in making these ideals appear normal, natural, and necessary for them to enjoy power over other men and most women. In exhibiting or enacting these hegemonic ideals within health behaviours, some men reinforced strongly held cultural beliefs that men are more powerful and less vulnerable than women through believing and demonstrating that health and safety are irrelevant (Broom & Tovey, 2009; Courtenay, 2011). For example, some men do not overtly display concern about their health in social situations because asking for help and caring for one's health is perceived as feminine (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002; O'Connor, 2002). Consequently, adhering to hegemonic masculine ideals can influence some men to suppress their needs, refuse to admit to or acknowledge their pain, and to avoid seeking medical treatment (Broom & Tovey, 2009; Lee & Owens, 2002; O'Connor, 2002). Thus, to maintain a dominant masculine appearance of being strong and robust, some men may negatively influence their health by ignoring important symptoms or refusing to seek help (Broom & Tovey, 2009; O'Connor, 2002).

Connell stated that this image of hegemonic masculinity could change over time and place as well as being subject to contestation within a particular culture (Levy, 2007). In contemporary society there are new and varied ways of being a man, for example some men adopt healthy masculine positions and accomplish historically feminine roles (Gough & Robertson, 2010; Sloan, Gough, & Conner, 2010). For instance in Galdas, Cheater, and Marshall (2007), Oliffe

(2005) and Robertson's (2003) research, some males were interested in their health and talked about and sought help for their health problems. These findings challenge dominant hegemonic forms of masculinity that embody the perception of men as naturally strong and tough (i.e., unaffected by pain). In addition, gender roles are changing and more men are staying at home to look after their children, and other men are fulfilling historically feminine occupations, such as nursing, cleaning, and preschool teaching (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010; Grunwell, 2010; Farquhar, 2007; Toufexius, 1999). Hence it is no surprise that more recent research has established that hegemonic masculinity masks the complexity and diversity of men, and only addressing the link between hegemonic masculinity and ill health is unlikely to improve the holistic health of males (Connell & Messerschmidt, 2005; Gough & Robertson, 2010; Sloan, Gough, & Conner, 2010). Thus, there is a need for researchers to continue to consider that males are capable of accomplishing multiple masculine ideals, which can also be protective of health (Sloan, Gough, & Conner, 2010). It is important to consider that not all men adopt unhealthy masculine positions and appreciate that some males are starting to adopt masculine ideals that are in contrast to the typical Western hegemonic masculinity.

In spite of this recognised potential for greater variety in how contemporary men conceptualise their masculinity, research suggests that most constructions of masculinities in Western civilisations remain largely unhealthy and males generally continue to use hegemonic resources and reject healthy beliefs and behaviours to demonstrate and achieve manhood (Broom & Tovey, 2009; Courtenay, 1998, 2000, 2011). This is corroborated in O'Connor's (2002) study of 60 Pākehā males aged between 15 and 24 in which the participants reflected that a stereotypical man would not have a great interest in health care practices, and they suggest that such practices symbolised a difference between men and women. Some participants believed carrying out positive health behaviours and beliefs was feminine and described a subculture in New Zealand, which required men to be tough, strong, and self-reliant in response to their health.

Correspondingly, O'Connor argued that there is much to discourage men from taking care of their health, as males are required to negotiate between health status, masculinity, and the social setting which on many occasions position masculinity and health care in conflict. In addition, some men also construct masculinities by embracing risk through boasting about alcohol consumption, driving dangerously, and partaking in dangerous occupations or sports that can be detrimental to their health (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002; O'Connor, 2002). In these ways, and as shown in O'Connor, masculinities are defined against positive health behaviours and beliefs. In summary, constructions of masculinity can be protective to males' health; however, evidence would suggest that masculine ideals are still

largely detrimental to their health. In the next section, I explain how the influence of masculinities can specifically influence asthma management.

### **1.5 The influence of masculinities on adherence to asthma treatment**

The unique support needs of adolescents with asthma has been neglected, consequently little is known about how adolescents experience asthma in their daily lives and how sociocultural factors affect their asthma management (Bjorksten, 2000; Gabe, Bury, & Ramsay, 2002; Letourneau et al., 2012; Nocon & Booth, 1990; Spargo & Couriel, 1997). More of a concern is the general paucity of research examining adolescent males' experiences of asthma. Courtenay (1998) has argued that the health of male adolescents deserves more attention than it receives. However, within the limited available data there is some evidence to suggest that asthma mortality is more frequent in adolescent males (Price, 1996). This is at least partly attributable to the higher incidence of asthma experienced by males through childhood to adolescence and most male adolescents' reluctance to receive and maintain asthma treatment in comparison to females (Anderson, Pottier, & Strachan, 1992; Iley, 2007; Price, 1996; Rhee, Wenzel, & Steeves, 2007; Williams, 2000a). In adulthood, the incidence of asthma reverses and there is a higher prevalence in females, however among the adults diagnosed with asthma, males are also less likely than females to receive medical treatment (Anderson, Pottier, & Strachan, 1992; Draper & Borton, 2010; McKinlay, 2005). The results of recent studies suggest that females are more likely to incorporate their asthma into their identity, and are willing to share and treat their asthma symptoms in public settings (Iley, 2007; Rhee, Wenzel, & Steeves, 2007; Tollefsen et al., 2007; Williams, 2000a). Additionally, similar to adult males, adolescent males in public settings are reluctant to behave in a manner that undermines their masculinity (e.g., toughness and independence). Hence, some minimise the effects of their asthma by downplaying their asthma symptoms and/or not using their medication, which increases the risk of adverse health outcomes, for example an asthma attack (Iley, 2007; Rhee, Wenzel, & Steeves, 2007; Williams, 2000a). However, some masculine traits can also decrease the risk of asthma related health problems. Williams (2000a) recognised that sport is important in the construction of masculinity, which encouraged most adolescent males in her study to lead health-promoting lifestyles of being physically active. Being active can help reduce asthma symptoms by improving lung capacity and reducing the resistance to breathe (Szeftel, 2007). Thus, researchers need to consider both healthy and unhealthy lifestyles attributable to masculine expressions when researching how asthma affects the everyday lives of male adolescents.



## 1.6 Significance of the study

Considering that the evidence on male adolescent asthma medication compliance is limited, the purpose of this study was to explore how male adolescents understand and manage their asthma symptoms. In the context of this study, I investigated male adolescents' perceptions of societal and masculine influences on their asthma management. This study used a qualitative descriptive [QD] study design in order to chronicle the beliefs and experiences of adolescent males with asthma (Magilvy & Thomas, 2009; Neergaard, Olesen, Andersen, & Sondergaard, 2009).

Couriel (2003) encourages researchers to understand the attitudes of adolescents with asthma through listening and recognising the issues that are important to them. This was accomplished by conducting individual semi-structured interviews with the participants, investigating questions about their perceptions of masculinity, asthma management, interpersonal relationships, and their physical wellbeing. It was important to complete a gender-specific investigation since previous studies have identified gender differences in the incidence of asthma and how adolescents view their health and manage their asthma (Anderson, Pottier, & Strachan, 1992; Iley, 2007; Price, 1996). The occurrence of asthma is more common in adolescent males, they are less likely to be interested in health care practices and have been identified as more reluctant to incorporate their asthmatic condition into their social identities, disclose their illness, and treat themselves in public settings (Draper & Borton, 2010; Iley, 2007; O'Connor, 2002; Price, 1996; Rhee, Wenzel, & Steeves, 2007; Williams, 2000a). Furthermore, this study was valuable from a life-course perspective, as adolescence is a sensitive period where life events can have adverse and/or protective effects on their current and subsequent health (Wethington, 2005). Adolescence is an important time to educate, support, and intervene with positive behaviour change to prevent and minimise the accumulation of asthma incidence over time.

Letourneau et al. (2012) supported intervening in adolescence and stated it has the potential to instil positive asthma management behaviours throughout adolescents' life-course. Lee and Owens (2002) support this premise and suggest that health behaviours learnt in adolescence are strong predictors of longevity and well-being in older age. Ideally, this study will fill a gap in our current understanding of how male adolescents understand and manage their asthma symptoms. This will hopefully lead to further research and provide evidence for researchers, educators, and health providers to consider and support the creation of specifically targeted interventions and tailored support for male adolescents with asthma.

## **1.7 Purpose, research question, and objectives of this study**

The purpose of this study was to explore how male adolescents understand and manage their asthma symptoms. Therefore, in the context of this study I investigated male adolescents' perceptions of societal and masculine influences on their asthma management.

The research question of this study is:

How do perceptions of masculinity influence asthma management of adolescent males?

The specific objectives are:

1. Review current literature on masculinities and societal influences and examine how these may affect/influence male adolescents' interpretations and management of their asthma symptoms.
2. To explore and describe male adolescents' perceptions of masculinities and societal influences and how these understandings affect their interpretations and management of asthma symptoms.

## **1.8 Overview of the following chapters**

Chapter Two describes the literature search strategy and presents a detailed review of international studies that investigated either the societal influences on adolescent asthma management or the impact of masculinities on the health and asthma management of males. Due to the insufficiency of gender-specific literature on males, as a first step I critically reviewed international research focusing on male and female data pertaining to the social influences affecting asthma medication adherence during adolescence. Furthermore, to ascertain how social influences may impact specifically on male adolescents' asthma medication management I showed what is understood about men's health and then analysed the constructions of masculinity and its influence on men's health. Lastly, I considered the potential influence of masculinities on adolescent males' asthma management and provided a literature review summary.

Chapter Three explains the rationale for the selection of a qualitative descriptive methodology and the methods used. The methods section then outlines the inclusion criteria, recruitment, data collection, data transcription, and analysis. Finally, I described how trustworthiness was established according to Lincoln and Guba's (1985) criteria for qualitative research.

Chapter Four presents the findings from the qualitative semi-structured interviews depicting the participants' perceptions regarding how societal and masculine influences affected their interpretations and management of their asthma symptoms. At the outset, this chapter provided

the background to the participants by describing their demographic details. This was followed by a description of the themes that were identified in the analysis; these themes were examined in detail to depict the participants' beliefs surrounding societal and masculine influences on their asthma medication management. The findings were directed and supported through summaries and quotations from the participants' experiences, so the voices of the participants could be directly heard. Lastly, I generated a summary of findings.

Chapter Five explores the rich descriptions revealed by the participants in Chapter Four in the context of extant literature discussed throughout Chapters One and Two. I then indicated how these findings are consistent with or differ from previous studies and I illustrated the new insights gained from this study. The limitations, recommendations, and ideas for further research of this study were also explored.

## **Chapter Two:**

### **Literature Review**

In this literature review I will firstly outline the literature review strategy and present an overview of the relevant literature obtained, noting that there is limited research on male adolescents' interpretation and management of their asthma symptoms. Due to the insufficiency of gender-specific research on males, I will critically review worldwide research that investigates the social influences on asthma medication adherence during adolescence. Within this section, I will examine how the influences of desiring normality, peer acceptance, peer pressure, and stigma and stereotyping of people with asthma can effect adolescent asthma management. The aim of the second half of this literature review is to consider the potential influence of masculinities on adherence to asthma management in male adolescents. This section will initially consider the state of male health research, secondly it will analyse the constructions of masculinity and its influence on men's health and consider how these constructions of masculinities influence male adolescents' asthma management concluding with a literature review summary.

#### **2.1 Inclusion / exclusion criteria**

As mentioned earlier, prior to 1970 most men's health research focused on health from a biological perspective and generally did not consider the sociocultural aspects related to men's health, therefore I set the search parameter to start at the year 1970. In addition, several authors (e.g., McKinlay, 2005) have suggested that the majority of literature on men's health has been published during the last 20 years, thus I set the inclusion criteria periodic date for men's health literature from 1970 to 2013. A search parameter encompassing 43 years could be considered broad, out dated, and irrelevant to the needs of males today however it was required because previous researchers (e.g., Lee & Owens, 2002; Mackie, 2005) have noted that there is limited available published work on the sociocultural implications on males' experience of health. There were no set parameters for the origin of the literature except that the research was published in an academic journal or book and written in the English language.

#### **2.2 Key search words**

The original search words used were 'asthma', 'asthmatic', 'social', 'societal', and 'adolescents'. I used the term 'societal' interchangeably with 'social'. The term 'social' is a more commonly used word with much broader definitions whereas the term 'societal' is perceived by some as an

overcomplicated scholarly word which is more restrictive (Nichol, 2012). Semantic distinctions between words like ‘social’ and ‘societal’ may be subtle but can be important in deriving research findings. They both mean pertaining to society, but ‘social’ is more likely to appear in phrases referring to individuals rather than groups with regard to interpersonal contact (i.e., social disposition or social engagement) whereas ‘societal’ refers more directly to contextual forces within human populations (i.e., societal pressure to conform; Nichol, 2012). I used the additional search words specific to the age and gender of the studied population: ‘adolescence’, ‘youth’, ‘teens’, ‘teenagers’, ‘male’, ‘men’, ‘boys’, ‘masculinity’, and ‘masculinities’. The search words used for potential social influences of asthma were ‘stigma’, ‘peer pressure’, ‘identity’, ‘body image’, and ‘compliance’. I combined these diverse characteristics to create search terms (e.g., ‘male’ AND ‘adolescents’ AND ‘asthma’ AND ‘stigma’).

### **2.3 Search method**

This literature review was carried out using the Internet, databases within the University of Canterbury library, and bibliographies of literature obtained from the original searches. I completed an electronic database search utilising EBSCO Host, which has access to multiple online databases such as PsycINFO. I used specific search engines related to men’s health and the age demographic of the studied population: Journal of Men’s Health, American Journal of Men’s Health, International Journal of Men’s Health, Men and Masculinities, Psychology of Men and Masculinity, Journal of Adolescence, Journal of Adolescent Health, and Journal of Youth Studies. The University of Canterbury’s Online MultiSearch which derives articles from all the databases and catalogues within the University was also utilised to ensure I had covered the possible relevant literature.

### **2.4 Search results**

Forty-three relevant articles met the inclusion criteria and/or were relevant to the research objectives. Due to limited relevant research, I utilised literature, which I had previously acquired, and I found additional sources by searching reference lists from key articles. From this total, 25 articles met the inclusion criteria and were identified from the selected electronic database search engines. An additional eight articles were discovered using the reference research method, and 10 articles were obtained from earlier literature searches. I discovered 14 articles on masculinities in health and 29 articles on the social impacts of asthma on adolescents; two of those articles incorporated male perspectives. I was unable to obtain any international research specifically investigating social and/or masculine influences on adolescent males’ asthma management.

For the remainder of this chapter, I have incorporated the literature review findings into two sections to explain (a) how social influences may affect adolescent asthma medication adherence, and (b) to articulate what is understood about men's health and how the influence of masculinities affects adolescent males' asthma management.

## **2.5 Social influences on asthma medication adherence**

### **2.5.1 Desiring normality and peer acceptance**

Within this section, I will look at how internal (implicit) peer pressures may influence adolescents to mismanage their asthma. For the purpose of this study internal peer pressures are influences that affect adolescents beliefs about themselves. For instance, an adolescent may feel alienated and/or may experience low self-esteem because they do not participate in the activities that other adolescents in their immediate surroundings participate in.

Most adolescents with asthma desire normality and seek to be perceived as normal by others (e.g., friends and teachers) in social situations (Ayala et al., 2006; Couriel, 2003; Letourneau et al., 2012). Historically, there is a multitude of definitions for the term 'normality'; however, for the purpose of this study normality will be analysed from the perspective of how it is linked to social desirability and conformity (Bartlett, 2011). Hence, normality will be referred to as a set of typical and socially approved characteristics derived from the majority of a society's population (Bartlett, 2011). Some adolescents with asthma will find it more difficult to acquire the characteristics deemed normal for their peer groups (e.g., playing sports and swimming), consequently they face the risk of being perceived as abnormal by others. Abnormality deviates from what is normal or usual, and being perceived as different can increase the risk of social exclusion, teasing, or ridicule by their highly valued peers, and may exacerbate insecurity and social anxiety (Bruzzeze, Fisher, Lemp, & Warner, 2009). Consequently, some adolescents with asthma worry about their peers' perceptions of their asthma (Ayala et al., 2006; Couriel, 2003; Letourneau et al., 2012).

Peer relationships tend to be a central concern for adolescents, as a considerable portion of their waking hours is spent in the company of their peers (Hartup & Stevens, 1997). Peer acceptance is the degree to which an individual is socially accepted and liked by his or her peers (Oberle, Schonert-Reichl, & Thomson, 2010; Oberle & Schonert-Reichl, 2012) and is an important aspect within adolescents' development and well-being. Positive peer relationships provide sources of

affection, intimacy, feelings of inclusion, and enhancement of self-worth (Oberle, Schonert-Reichl, & Thomson, 2010). In adolescence, peers are known to have a significant influence on behaviour, and attitudes and social judgments are typically shaped by peer networks. Thus, many adolescents are highly influenced by their perceptions of the opinions of their peers (Covey, 2004).

Accordingly, most adolescents desiring normality and/or peer acceptance often express fear and embarrassment about asthma and taking medication in front of peers, which may affect both technique and frequency of asthma medication usage (Bruzzese, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Gibson, Henry, Vimpani, & Halliday, 1995; Rhee, Wenzel, & Steeves, 2007). These findings were evident in Bruzzese, Fisher, Lemp, and Warner's (2009) quantitative study, which analysed asthma and social anxiety in adolescents. They gathered questionnaire data from 765 American adolescents, (mean age 15.2 years, 76% female) with 18.6% percent of the sample identified as asthmatic. Their findings showed that most adolescents with asthma feared being viewed negatively by their peers and reported more generalised discomfort or inhibition in social situations than their counterparts without asthma. Subsequently, they were more likely to report social anxiety, perhaps related to concerns about exhibiting symptoms or taking medication in front of peers (Bruzzese, Fisher, Lemp, & Warner, 2009). Social anxiety is a feeling of discomfort, fear, or worry that is centred on interactions with other people and involves a concern with being judged negatively, evaluated, or looked down upon by others (Jacobs & Antony, 2012). Because of adolescents' concerns with peer acceptance, increased feelings of social anxiety may discourage some adolescents from maintaining adequate compliance with their asthma medication management in social settings (Bruzzese, Fisher, Lemp, & Warner, 2009).

Correspondingly, Gibson, Henry, Vimpani, and Halliday (1995) also completed a quantitative survey with a sample of 4,161 Australian adolescents aged 13-14 years old. Twenty-three percent were identified as having asthma. Their findings showed that asthma had caused mild to moderate impact on the participants' quality of life, particularly with strenuous exercise. Additionally, 38% of adolescents with asthma agreed that students at high school are embarrassed about using their asthma inhalers, which makes it less likely that young people will acknowledge their symptoms and reduces the frequency of using their asthma medication in public. In these studies females were over represented in the participants, also the studies were quantitative in nature, capturing data through large-scale questionnaires.

Furthermore, findings from these studies indicated that various adolescents with asthma were fearful of being 'different', worried about peer rejection, and they experienced uncertainty. Some also felt frustrated, resentful, angry, depressed, lonely, like 'outsiders', isolated, helpless, and as though they had somehow failed when they were diagnosed with asthma (Bruzzeze, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Rhee, Wenzel, & Steeves, 2007). To help counteract these feelings many adolescents pushed themselves to keep up with their peers in a desire to be 'normal' and disregarded potentially serious consequences on their health (Velsor-Friedrich, Vlases, Moberley, & Coover, 2004). For example, some adolescents would ignore their asthma symptoms and medication to preserve their reputation of being normal in social setting, (e.g., participating in a sports game). The Asthma and Allergy Foundation of America (n.d.) further support that denial of being asthmatic, or of the severity of the illness, is a common reason for non-compliance with prescribed medication during adolescence. However, it is important to take into consideration that the term 'non-compliance' can imply singular causation at an individual level, whereas additionally the responsibility could lie externally, for example within healthcare providers if the proposed asthma treatment is inappropriate, too expensive, and/or inadequately explained (Pomare et al., 1991). In summary, the key messages from these studies are that most adolescents with asthma desire to be normal and worry about how their peers view them. Consequently their decision-making criteria is often determined by what their friends might think of them, which affects compliance and response to asthmatic symptoms and/or using medication (e.g., inhaler) in public settings (Bruzzeze, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Gibson, Henry, Vimpani, & Halliday, 1995).

### **2.5.2 The role of peer pressure**

Peer pressure can be external (explicit) or internal (implicit). In this section I will investigate how external peer pressure may affect adolescent asthma management. For the purpose of this study external peer pressure is when peers urge a fellow individual to do something that they do not usually do and would not have done if their peers had not urged them to do so.

External peer pressure increases during adolescence, thus many authors assume that peer pressure must influence asthma management during this developmental period (Ayala et al., 2006; Bruzzeze, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Fitzgerald, 2001; Kyngäs, 1999; Kyngäs, 2004; Letourneau et al., 2012; Price, 1996). For example, Price (1996) examined the needs of adolescents with asthma and concluded that it is vital for physicians to recognise the importance of peer pressure in this group of patients. Furthermore, Couriel's (2003) study illustrated that peer pressure among other influences can affect asthma medication compliance of



adolescents. However, the majority of literature used to ascertain the influence of peer pressure on adolescent asthma medication adherence generally focused on other chronic illnesses (e.g., diabetes) and/or stated peer pressure as an influence without coherent supporting evidence. For example, Letourneau and colleagues (2012) research on the impact of online support for youth with asthma stated in their introduction that adolescents experienced peer pressure that results in non-adherence to health regimens and other risky behaviours. However, the majority of references they used did not have clear evidence that peer pressure affects adolescent asthma management. Consequently, very few studies have explicitly examined this possibility. The exception being Kyngäs's (2004) research of adolescents with a chronic illness (asthma, epilepsy, diabetes, or juvenile rheumatoid arthritis) which specifically provided findings that indicated adolescents experienced teasing because of their chronic illness. In summary, previous literature does not clearly establish if external peer pressure is an influence on adolescent asthma medication adherence.

### **2.5.3 Stereotyping and stigma of asthmatics**

A stereotype is a preconceived opinion, idea, and image about asthmatics in society, which can be positive, negative, or neutral and is culturally sustained through shared belief systems that can be represented in the visual media, for example television shows and movies (Clark, 2012). In contrast, stigma is a set of negative beliefs that a society or group of people have about particular attribute or condition. The stigmatised trait sets the bearer apart from the rest of society, bringing with it feelings of shame and isolation (CDC, 2011). Andrews, Jones, and Mullan (2013) stated that there is limited research specifically examining the impact of stigma on people living with asthma. However, a few studies do exist that have found that stigmatisation of people with asthma occurs and it can be attributable to higher asthma morbidity. For example, Sibbald's (1989) research results showed that one in four (25%) of her 210 British participants, aged 16 to 85 expressed strong feelings of stigma about being asthmatic. While Johnson, Henderson, Pedersen, and Stonecipher's (2011) research of US newspapers found more than 28% of articles about asthma contained a stigma cue. Since there is limited research specifically examining the impact of stigma on people living with asthma, I chose to analyse three studies that had participants from different age demographics (9-12, 11-14, and a mean age of 33 years). Clark's (2012) study completed a content analysis of 66 movies with asthma-related references; she then interviewed 12 American children aged 9-12, to study how children made sense of movie depictions of asthma. The participants interviewed were children suffering from asthma as well as their nominated "best friend". From the study findings of the movie content four recurring scenes for asthma were noted. Firstly, it was evident that repetitive scenes of characters with

asthma were not “ordinary” or “regular” people and were generally represented as a wimp and a geek whom is physically and/or socially handicapped. Consequently, a character might be socially excluded, discriminated against, bullied, or mocked by others because of differential behaviour (e.g., experiencing asthma symptoms or using an inhaler). For instance, in the movie *Sidekicks* the teen character Barry who has asthma holds low social status among his high school peers, because he cannot keep up in gym class due to his asthma. Subsequently he faced criticism, lack of respect and approval from his peers which contributed to the girl he liked not dating him because of his lower status. A male participant in Clark’s (2012) study worried that from media representations asthma sufferers may seem “dumb” or “wimpy” and might lead peers to think the same. Additionally, other participants in this study worried or braced for social backlash based on the movie content. Children collectively and individually judge from the media whom they wish to emulate and whom they do not want to be like, this might explain why some young people with asthma, at least some of the time, are socially excluded. Consequently, the stigmatisation of people with asthma can result in feeling a sense of separateness from family and friends (Clark, 2012).

In the three other themes depicted through Clark’s (2012) movie analysis, asthma and medication management was misrepresented. Asthma medication was mainly overused reactively in response to stressful situations or danger, asthma was presented as self-curing through willpower, and medication was used as a self-defence weapon. For example, in the movie *The Goonies* the character Mikey whom has asthma threw away his inhaler, giving the impression that asthma is curable if you assumed the “right” mental attitude or in the movie *Jimmy Neutron* the aliens retreat after being sprayed with an asthma inhaler. Clark (2012) stated movies in general implicate asthma as leading to victimisation, rather than heroics, and leading to limitation, rather than functionality. Consequently, after viewing the movie clips some participants with asthma in her study became more concerned that their asthma might create stigmatisation. Clark’s participants expressed that they wanted the media to exaggerate positive social behaviours when depicting asthma; they wanted asthma treated seriously as a condition, and the promotion of responsible self-treatment.

The second study I analysed was by Ayala and colleagues (2006), who recruited 50 American students, aged 11-14 to participate in focus groups separated by their school grade. The purpose of their study was to better understand asthma and asthma management from the perspective of school-aged students. Media portrayals of people with asthma were not a focus of this study; however, the older participants (12-14 years old) in this study discussed media portrayals of people with asthma. They believed that many people with asthma on television or in movies

were portrayed as weak and unable to do the same things as other people. Additionally, several participants explained that the media did not publicise asthma as frequently as other diseases (e.g., diabetes and AIDS), therefore some revealed the partial media coverage gave their peers a belief and the impression that asthma was not a serious disease (Ayala et al., 2006). The participants' views illustrated in this study are consistent with Clark's (2012) findings that most participants considered that the media reinforced a negative stereotype of people with asthma.

A third study, by Andrews, Jones, and Mullan (2013) examined whether adults with asthma experience feelings of stigma due to their condition and, if so, how this affects their asthma self-management. They recruited 72 participants with a mean age of 33 years, which was heavily female dominant (73%). All the participants were diagnosed with asthma and completed a web-based survey. Only 9 respondents out of 72 (12.5%) reported feeling no stigma. Rather, their findings indicated that poor asthma management was significantly associated with feelings of stigma. Stigmatisation has harmful implications for asthma self-management due to its effect on self-efficacy and the obstacles it places on social relationships (Andrews, Jones, & Mullan, 2013). Self-efficacy is a person's belief in his or her ability to succeed in a particular situation (Bandura, 1994). If people with asthma constantly see stigmatised media images of asthmatics this can affect their confidence to effectively manage their asthma, especially in public settings. For example, within Adams, Pill, and Jones' (1997) research, some of their British participants aged 19-57 years denied or distanced themselves from asthma because the self-image available for acknowledged asthmatics is negative (e.g., 'weakling' and 'wimp'). The researchers explained the pattern of associations by suggesting that most of these participants wanted to avoid association with what they clearly thought of as a stigmatised group and correspondingly this perception affected the frequency of asthma medication usage and technique. As most participants explained, they were embarrassed about using their medication in public settings and wanted discretion and privacy in a desire to lead a normal life (Adams, Pill, & Jones, 1997). In summary, the media continues to perpetuate a negative stereotype of asthmatics, which can stigmatise asthma symptoms and management. To fit in and minimise the stigma of asthma, some adolescents tried to pass as non-asthmatics to preserve their reputation as a 'normal' adolescent through downplaying their asthma symptoms and/or minimising medication use in public (Andrews, Jones, & Mullan, 2013; Ayala et al., 2006; Clark 2012; Jessop & Rutter, 2003; Stuart, 2006).

The studies reviewed in this section were mostly quantitative and most participants in each study were female. Consequently, there seems to be a need for in depth qualitative research focusing on the experience of males with asthma, particularly adolescent males. The evidence from the reviewed studies suggests that the media does foster a negative stereotype of people with asthma and the stigma associated with asthma symptoms and asthma management is potentially an important barrier to effective self-management practices. Based on the limited scope of information in the recent literature, the issue of stigma and stereotyping of people with asthma warrants further investigation (Andrews, Jones, & Mullan, 2013).

The next main section in this chapter analyses how masculinities can influence asthma management. This section is divided into three main themes, (a) the state of male health research, (b) constructions of masculinity and its influence on men's health, and (c) the influence of masculinities on adherence to asthma treatment.

## 2.6 Masculinities and Asthma

The limited available research and literature pertaining to men's health and adolescent males with asthma was organised according to three themes that address the potential effects of social and masculine influences on male adolescent asthma management. The first theme analyses the history of international research on men's health and then evaluates New Zealand's contribution to the field of research on men's health. I then analyse the status of men and adolescent men's health by investigating their lifestyles, behaviours, and beliefs surrounding their health. The second theme explains the relationship between conceptions of masculinity and men's health, focusing both on hegemonic masculinity and alternative masculinities. Constructions of masculinity in New Zealand and during the adolescent period are also considered. Finally, the third theme examines gender differences in the incidence of asthma and investigates how the potential influence of masculinities can affect gender disparities in adherence to adolescent asthma management.

### 2.6.1 The state of male health research

#### **The need to go beyond biological sex differences in addressing men's health issues**

Historically in men's health literature there has been a focus on the differences between men and women and how the biological characteristics of men may affect the incidence of risk-taking, morbidity, and mortality (Creighton & Oliffe, 2010; Evans, Frank, Oliffe, & Gregory, 2011; Lee & Owens, 2002; McKinlay, 2005). It is well documented that the biological characteristics of men can influence their health. For example, men's lack of oestrogen increases the risk of heart disease by lowering their levels of "good" cholesterol (high-density lipoprotein) relative to women. Additionally, higher oestrogen levels contributes to the lower levels of atherosclerosis (build-up of plaque inside arteries) found in women compared with men, which provide women with better protection from stroke, heart attack, and death (Courtenay, 2011; Lee & Owens, 2002). Most males are also at greater risk of mortality because of congenital abnormalities, and women have higher antibody levels, which contributes to increased longevity (Courtenay, 2011).

Although a variety of biological factors do contribute to men's health risks, Sloan, Gough, and Conner (2010) proposed that social factors and cultural perceptions of masculinity could also affect the health beliefs and lifestyles of men. In Covey's (2011) book *Dying to be Men* he summarised evidence of gender differences in behaviours that influence the health and longevity of men and women in the United States. His findings established that there at least 30 different behaviours and health-related lifestyles habits fulfilled by most males which make them more

vulnerable to preventable, premature, and excess mortality. For example, it has been found that males have less healthy dietary habits and are overweight as they eat more meat, fat, and salt and less fiber, fruits, and vegetables than females (Courtenay, 2011; Lee & Owens, 2002; McKinlay, 2005). In addition, males are less likely to use sun protection (e.g., sunscreen, shade, and protective clothing) and wear safety belts than females which are factors that also affect the health and longevity of males (Courtenay, 2011; Pichon, Corral, Landrine, Mayer, & Norman, 2010). The adverse health effects of these behaviours are mostly preventable, yet many men still engage in these risk-taking behaviours. It would be advantageous to investigate how men interact within their social and cultural contexts, to understand what sociocultural influences may affect men's behaviour and lifestyles and contribute to their immediate and long-term health needs. Previous biological research undoubtedly has its strengths but has seldom been extended to consider the cultural and social constructs of masculinity which men are surrounded by and how the influence on men to choose behaviours may shorten their life expectancy or reduce their quality of life (Lee & Owens, 2002; Mackie, 2005). Consequently, little is known about how men personally experience their health over the life-course (Mackie, 2005). Therefore, to understand the impacts on male health and longevity it is important to consider biological influences within the complex interaction among biology, environment, and behaviour (Courtenay, 2011).

### **The state of male health research in New Zealand**

There is a small but growing body of literature specifically investigating the health of males in New Zealand (Barwick, 2004; Johnson, Huggard, & Goodyear-Smith, 2008; Jones & McCreanor, 2009; McKinlay, 2005; Neville, 2008). Neville's (2008) research exploring the state of men's health revealed only a few New Zealand Medical Journal articles that have specifically focused on men. Predominantly research pertaining to men's health has focused on prostate cancer (a cancer specific to males) and in comparison, there was a comprehensive body of published literature on women's health. A review of policy and progress on men's health across 11 countries, described New Zealand as paying little, or ad-hoc attention to men's health (Jones & McCreanor, 2009). Also of concern is the insufficiency of research on the sociocultural influences on males' health (Barwick, 2004; Jones & McCreanor, 2009; Mackie, 2005; McKinlay, 2005). For example, in Jones and McCreanor's (2009) investigation of the current state of men's health in New Zealand, they discovered that little attention had been paid to understanding the lived realities of males, including how they conceptualise health, the major factors that influence their health and how they respond to health problems. This is supported through Barwick's (2004) research of young males in New Zealand, she concluded that in-depth

research with young men about their experiences of the world, their aspirations and their problems is hard to find.

Throughout this review McKinlay's (2005) literature review about men and their health in New Zealand appears to be the fundamental study on men's health in New Zealand with national health websites and other published work often referring to her study. The review confirmed that health outcomes were poorer for New Zealand men than women, in terms of morbidity, mortality, and life expectancy. The findings from the review suggested that further in-depth research on all dimensions of men's health is needed to improve the understanding of men and their health. Research beyond biological factors is required to identify male specific needs and barriers to health, as issues around men's health remain under-investigated and unresolved. In addition to McKinlay's work, Mackie (2005) illustrated the state of male health in New Zealand at the first New Zealand Men's Issues Summit. Mackie reported that more men than women are dying in the workplace, on the roads and in water, and from cancer, heart disease, and suicide, partly because they have learned not to value themselves. He said the higher mortality of males has been known for many years and is now widely accepted. Despite this Mackie stated the current medical and social debate around men's health is undermined and under informed because of a failure to explore men's perceptions of health and maleness as a personal, cultural, and social phenomenon. The literature on gender differences in health largely fails to investigate why men behave as they do because research on men's health predominantly compares men against women's attitudes, behaviours, and beliefs. In summary, there is mounting awareness that men's health is problematic yet health professionals, researchers, and policy makers still know very little about how men will personally experience health over their lifetime.

### **The health status of men**

While it is recognised that it is important to increase gender-specific research on men's health due to the limited scope of the current literature, there are also a number of additional reasons why research in this domain is important. First, not only are there biological differences between men and women that contribute to distinct health related issues, there are also gender differences in how men and women view their health and deal with illness (Iley, 2007; McKinlay, 2005). Men behave differently from women in terms of health awareness and their use of health services (Cecil, McCaughan, & Parahoo, 2010). For instance, at an individual level some men are more at risk compared to women for adverse health outcomes due to a tendency to be reactive rather than proactive in terms of using preventive health care (Lee & Owens, 2002; McKinlay, 2005). McKinlay (2005) analysed the health-seeking behaviours of people in New Zealand and her results showed that males were significantly less likely than females to have

visited a general practitioner in the last 12 months. Courtenay (2011) found that twice as many men in the United States have no regular source of health care and consequently men use fewer health care services than women and visit physicians less often. Delays in obtaining timely health care can have profound consequences, as early detection is often critical for preventing disease and premature death (Courtenay, 2011).

Another compelling reason to examine men's health issues more closely is that at a social level some men fulfil unhealthy gender stereotyped behaviours to maintain their manliness (e.g., high-fat and high-alcohol consumption; Lee & Owens, 2002). In general, men demonstrate less healthy dietary habits than women, they consume less vegetables and more meat, fat, and salt which contributes to men's weight issues and increases the risk of cardiovascular mortality (Courtenay, 2011; Lee & Owens, 2002). The increased occurrence of preventable and premature mortality in males is also linked to higher alcohol intake. Men drink significantly more than women in all age groups (Scambler, 2008). This was evident in the 2011/2012 New Zealand Health Survey findings of 12,596 adults aged 15 years or over. The results showed that men were more likely to have consumed alcohol in the past 12 months, and even more concerning was that among the people who had consumed alcohol in the past 12 months, men were much more likely to have hazardous drinking patterns than women (men, 26% and women, 12%; Ministry of Health, 2013). Drinking high quantities of alcohol is a major avoidable risk factor and is associated with numerous harmful health and social consequences, such as unintentional and intentional injuries, diseases, cancers, liver cirrhosis, nerve and brain damage (Ministry of Health, 2013; OCED, 2013).

In addition to high-fat and high-alcohol diets, there are social expectations and gender-based assumptions for men to fulfil dangerous occupations and leisure activities (Lee & Owens, 2002). For example, the majority of dangerous occupations (e.g., soldiers, police officers, firefighters, truck drivers, fishermen, miners, and construction workers) and activities (e.g., rock-climbing, hang-gliding, car and motorbike racing) are mostly fulfilled by men (Courtenay, 2011; Scambler, 2008). Consequently, more men are exposed to occupational, traffic-related, or recreational accidents. For example, Goodyear-Smith and Birks (2003) found that almost 100% of occupational deaths in New Zealand were male. Additionally, Johnson, Huggard, and Goodyear-Smith's (2008) study illustrated the Accident Compensation Corporation [ACC] (2006) Injury Statistics which showed that 84% of all fatal accidents were male and that males were more likely to die from injuries than females at all ages. Therefore, there is evidence to suggest that males are more involved in more dangerous risk-taking occupations and activities than women (Courtenay, 2011; Lee & Owens, 2002; Porche, 2005). In summary, it is evident that most men



are more likely than women to adopt behaviours and beliefs that undermine their health, so they are at greater risk for preventable death.

It is widely acknowledged in the Western world that men do not live as long as women and experience greater mortality from heart disease, stroke, cancer, diabetes, intentional and non-intentional injury (Courtenay, 2011; Lee & Owens, 2002; McKinlay, 2005; Neville, 2008; Porche, 2005). In New Zealand, McKinlay's (2005) study showed a gap of 5.2 years between male and female life expectancy, and Statistics New Zealand (2010) articulated that on average women live 5.9 years more than men in New Zealand (median life expectancy age: 76.9 for males and 82.8 for females). This gender gap in life expectancy is seen in many other countries too. White and Holmes (2006) analysed patterns of World Health Organisation statistics on premature death in men and women aged 15-44 across 44 countries. The results indicated that more men than women died prematurely in all these countries, and in most cases, the cause of early deaths were preventable. Furthermore, White and Cash's (2002) study of 17 European countries found men less than 75 years old had almost twice the number of deaths as women for most diseases. Consequently, it is evident that most men in Western countries have a lower life expectancy than women (Courtenay, 2011; Johnson, Huggard, & Goodyear-Smith, 2008; McKinlay, 2005; White & Cash, 2002; White & Holmes, 2006).

It is important to consider that there are enormous costs associated with premature death and disability that can affect families, employers, and society as a whole (McKinlay, 2005). When considered at a community and societal level, early loss of life or health problems for males can have profound socio-economic consequences (Porche, 2005). Additionally, premature death or disability can affect the financial security and relationships at the family level, as men play a critical role in families as fathers and sons providing care and support to other family members (McKinlay, 2005). In summary, it is vital to continue to complete specific gendered research on men in their social context because men are vulnerable to premature and preventable mortality, which is influenced by more than biological factors. Advances in research beyond biological factors can help support interventions that relate to individual and unique needs of men. Individualised strategies should encourage early detection of men's health problems and support timely treatment of disease, which can reduce preventable mortality and lead to benefits for men, families, and society (McKinlay, 2005; Porche, 2005).

## **The increased health risks of being an adolescent male**

It is well established that men are more often exposed to adverse health outcomes over their life-course than women, however males aged 15-24 years have been internationally identified as the age group which experiences the greatest gender disparity in mortality (Courtenay, 2011; O'Connor, 2002). In Barwick's (2004) study of young males in New Zealand she articulated that there is sufficient evidence to show young men are far more at risk to harm themselves or others in comparison with young women as young men are over-represented in mortality rates from suicide, alcohol-related harm, and traffic accidents. Correspondingly, the New Zealand Ministry of Health Statistics in the year 2000 found that 96 New Zealanders aged 15-24 died from suicide, 84% of whom were male (Barwick, 2004). Ten years later in the publication *Suicide Facts* from the Ministry of Health there was an increase in suicide rates from the year 2000 with 113 youth (15-24 years) who died from suicide, 69% were male (Ministry of Health, 2012). Courtenay (2011) elaborated that these same trends are apparent in America. He identified that this age demographic has the highest incidence of traumatic brain injuries and motor vehicle death rates, and young men represent 75% of people killed because of traffic accidents. Most of these diseases, injuries, and deaths are preventable; yet they occur because some young males are likely to see little point in changing risk behaviours (Lee & Owens, 2002). Consequently, some adolescent males are disproportionately at risk of injury and accidental death as most have low levels of health-promoting behaviours and high rates of risky behaviours (Courtenay, 2011; Lee & Owens, 2002).

It is well documented that young men experience higher incidence of intentional and non-intentional injuries; however, it is concerning that, there is such limited research investigating how adolescent males personally experience their health (Courtenay, 1998). Furthermore, Barwick (2004) stated that in-depth research with young men about their experiences is hard to find. Young men's insights on their health could provide beneficial understanding for health providers and policy makers. Therefore, it is essential to complete gender and age specific research on male adolescents because they are the most vulnerable age group for preventable and premature morbidity and mortality. Additional research understanding adolescent males' health experiences can better inform health providers to create specific health-promoting interventions to meet the unique needs of this population. Appropriate health-promoting interventions are vital for this age demographic as they become increasingly independent from their families and strive to be autonomous in their health management. Educating and promoting effective health management at this age may foster better longevity and well-being in older age (Lee & Owens, 2002).

In summary, there is a small but growing research base on the sociocultural aspects of men's health, which is slowly moving past the generic mean and frequency level comparisons of health between men and women. The comparative literature has clearly shown that men have less healthy lifestyles and they engage in far less health-promoting behaviours compared to women. In addition, young males aged 15-24 are especially vulnerable to premature adverse health outcomes. However, unresolved issues around men's perceptions of health remain, and researchers and policy makers still have an inadequate understanding about how males personally experience health over their lifetime. Therefore, men's health must be understood in the context of men's lives, thus the purpose of the next section is to evaluate how sociocultural influences of masculinity can affect men's health.

In the next section, I will expand on how sociocultural influences can affect the health of men analysing constructions of masculinity and particularly how hegemonic masculinity affects men's health.

### **2.6.2 Constructions of masculinity and its influence on men's health**

The concept, meanings, and history surrounding the terms 'masculinity' and 'masculinities' need to be understood within the context of this study. Broadly and simplistically, masculinity is the way men assert what they believe to be their manhood (Paris, Worth, & Allen, 2002).

Historically, the dominant model of masculinity was hegemonic masculinity; it refers to a socially dominant gender construction that subordinated femininities as well as other forms of masculinity (Broom & Tovey, 2009; Connell, 1995; Courtenay, 2011; Levy, 2007). As men's health research has grown, the restrictive form of hegemonic masculinity has been challenged by efforts demonstrating that there is greater diversity in masculinities other than hegemonic masculinity (Connell & Messerschmidt, 2005; Sloan, Gough, & Conner, 2010). Subsequently there is now greater recognition that masculinity is not a fixed entity, nor constrained to one geographical location, culture, age, ethnicity, or social class (Broom & Tovey, 2009; Connell & Messerschmidt, 2005; Sloan, Gough, & Conner, 2010). At the outset of this section, I build on the First Chapter's explanation of hegemonic masculinity and how it could potentially influence men's health. Secondly, I analyse how cultural masculine ideals can influence men's health within New Zealand. I then examine whether all males enact these ideals in their lives and how the idea of masculinities is evolving. Lastly, masculine ideals and the effect on young males' health are considered.

## **Hegemonic masculinity**

Although the majority of research linking health disadvantage with gender has focused on women, more recent literature has indicated that hegemonic masculinity can also place the health of men at risk (Broom & Tovey, 2009; Cecil, McCaughan, & Parahoo, 2010; Courtenay, 2011; Jones & McCreanor, 2009; Lee & Owens, 2002; Williams, 2000a). Hegemonic masculinity refers to a culturally normative ideal of male behaviour, it embodies the most honoured way of being a man (e.g., strong, robust, emotional and physical control); and it pressures men to position themselves in relation to it (Broom & Tovey, 2009; Connell & Messerschmidt, 2005). Hegemonic masculinity can be reinforced through the nature of social organisations, and is possibly accompanied by socially defined roles of how men should view their health and deal with illness (McKinlay, 2005). The role of hegemonic masculinity has historically been interpreted as detrimental to men's health (Cecil, McCaughan, & Parahoo, 2010; Courtenay, 2011). For example, the desire to fulfil hegemonic qualities of being tough and strong requires men to be reluctant in seeking medical advice and to avoid looking and/or feeling vulnerable (Broom & Tovey, 2009; Lee & Owens, 2002). This example was evident in Dolan's (2007) research, which interviewed British working class males and examined the way in which these males see their place in their community and in their networks. Dolan found that the norms and values that males associate with their masculinity, such as self-sufficiency and self-control are associated with difficulties in seeking out healthcare. In addition to Dolan's work, various researchers have also identified that most men are poor at help-seeking (e.g., visits to doctor and other health professionals) which has been identified as partially attributable to the influence of masculine roles and ideologies (Cecil, McCaughan, & Parahoo, 2010; Courtenay, 2000; McKinlay, 2005).

Courtenay's (2011) book, *Dying to be Men*, provided a comprehensive review of data and literature that identified specific gender differences in the health-related attitudes, beliefs, and behaviours of males. Courtenay explained that North American males adopt hegemonic masculine values, reflecting men as independent, self-reliant, strong, robust, and tough. He elaborated that males have enormous social pressure to adopt these beliefs and are at greater risk from being ridiculed and punished in comparison with females for not engaging in traditional masculine behaviour. For instance, utilising appropriate help-seeking behaviours is associated with emasculating traits such as vulnerability, dependence, and weakness, consequently most males risk and withstand physical discomfort rather than transgress social expectations of manhood (Broom & Tovey, 2009). Subsequently because of the pressure to fulfil these hegemonic masculine values, most males have greater difficulty identifying and expressing their

emotions, are more likely to perceive themselves as invulnerable to risks commonly associated with unhealthy behaviour, and are less likely to ask others for help (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002).

### **Masculinity within New Zealand**

The influence of masculinities can vary between countries, cultures, and social organisations. Therefore, in the context of this study it is important to gain an understanding of how masculinities within New Zealand may influence the health and well-being of males. In 1987, Jock Phillips published a book titled *A Man's Country*, which analysed the image of the Pākehā male in New Zealand. He assembled an image that New Zealand males of European descent are rugged, practical, strong, tough, silent, and emotionally self-reliant. These attributes were upheld through fulfilling practical occupations (e.g., farming and building) while in their spare time most males would compete in contact sports (e.g., rugby) against other men to demonstrate their masculine attributes. The stereotypes available for males in the mid to late 1900s were narrow, and the males outside of the perceived norm often suffered bullying or felt pressured to be tough and competitive (Phillips, 1996). These historical masculine attributes have been reinforced through the media and culture. For example, Duley (1997) explained how the New Zealand television coverage of the 1995 America's Cup campaign reinforced the masculine stereotype of being strong and hardworking. Another example is depicted culturally where men are constantly encouraged to construct and express their maleness using discourses that link alcohol with traditional masculine virtues (e.g., having a few beers with mates while watching rugby; Ellis & Collings, 1997). These linkages are most clearly exploited by the liquor industry through sports sponsorships and advertising where males, especially young males, are repeatedly exposed to images that associate drinking with the virtues of toughness, success, and self-reliance (Ellis & Collings, 1997). The demonstration of masculinity through practices such as drinking alcohol and displays of physical strength and domination carries potential negative health consequences, plus such practices may encourage denial of pain and suffering and delay help-seeking when it is needed (O'Connor, 2002). The need to conform to social stereotypes of masculinity may contribute to vulnerabilities and increased mortality, as discussed in the previous section.

Barwick (2004) completed a literature review and analysis on young males in New Zealand. She depicted that there are long held stereotypes of the New Zealand male which emphasises the importance of physical prowess along with emotional control and self-sufficiency. Consequently, in her analysis she articulated that young men are significantly more at risk of adverse health outcomes than women. For example, young men have higher rates of alcohol-related harm and are far more likely to die in a road crash. Barwick's (2004) findings are reinforced through Jones

and McCreanor's (2009) review of the current state of male health in New Zealand. They found the development and maintenance of masculine identities in New Zealand is strongly associated with problematic social environments that support unhealthy beliefs and behaviours (e.g., hazardous consumptions of alcohol). They observed that local ideologies and practices mirrored qualities of hegemonic masculinity with males being encouraged in social situations to be unwilling to admit weakness or to accept help, and demonstrating a propensity to participate in risk-taking behaviour. Consequently, Jones and McCreanor stated most males in New Zealand are at risk of subsequent poor health outcomes in comparison to females even though they generally have greater socioeconomic advantages than women. These advantages may include higher social status and higher paid jobs, which generally provide men with better access to health-related resources (Courtenay, 2011). Despite these advantages, most New Zealand males remain exposed to unhealthy masculine positions that can lead to adverse health outcomes.

### **Changing men and masculinities**

Worth, Paris, and Allen's (2002) book titled *The Life of Brian*, encompasses 10 published articles from different researchers who have explored ideas about and experiences of being masculine in the twenty-first century, and their implications for men's health in New Zealand. The researchers challenged the narrowly defined idea of the New Zealand male and described that it is unrealistic, out-of-date, and limiting. Hegemonic masculine theories were challenged through feminist movements in the 1960-80s and the gay movement of the 1980s which has contributed to today's society debating both privately and publicly new and varied ways of being men (Pascoe, 2003; Worth, Paris, & Allen, 2002). Subsequently, gender roles are changing. For example, some contemporary fathers are staying at home to care for their children, becoming household helpers, nurturers, and being actively involved with their children while the mother works (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010; Grunwell, 2010; Farquhar, 2007; Toufexius, 1999). Farquhar (2007) suggests it is now more socially acceptable for dads to be primary caregivers and there has been a significant change since the 1990s when people tended to look twice at men near children's playgrounds. This is encouraging, however it is important to consider even though some contemporary fathers are fulfilling historically feminine roles most fathers are still reported as retaining the traditional masculine characteristics of the provider who works long hours to provide financially for their family (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010). Evidence is starting to build which suggests that it is becoming more socially acceptable for males to accomplish non-traditional masculine characteristics. However, the traditional conceptualisations of hegemonic masculinity still influences the majority of males within New Zealand to adopt behaviours and beliefs that potentially

undermine their health (Barwick, 2004; Jones & McCreanor, 2009; Pascoe, 2003; O'Connor, 2002; Worth, Paris, & Allen, 2002).

Not all men adopt conventional 'unhealthy' masculine positions and there are some aspects of hegemonic masculinity that can also be protective of health (Sloan, Gough, & Conner, 2010). For example, physical activity is a health promoting behaviour that males have been reported to engage in generally more than females (Lee & Owens, 2002; McKinlay, 2005; World Health Organisation, n.d.; Williams 2000a.). Sloan, Gough, and Conner (2010) illustrated that some males use characteristically hegemonic masculine qualities of seeking to be independent, strong, muscular, and competitive to keep up with regular physical activity. The attributes involved within physical activity are important in constructing and reconstructing masculine identities. For example, Drummond (2002; 2003) articulated that historically sport was vital to males' identity because sport provided opportunities for boys to evolve into men by demonstrating their manliness, courage, and strength on the sports field. In addition, not all men adopt detrimental hegemonic masculine ideals either, and some transgress these social expectations of manhood. This rejection of hegemonic masculinity was evident within Oliffe's (2005) study of 15 Australian men aged 46-74 who had experienced a prostatectomy. His findings showed that when men are encouraged and feel safe to talk, they were more than willing to reveal their emotional and physical experiences of prostatectomy-induced impotence. Oliffe's findings challenge dominant masculine constructions of most men being reluctant to share and seek help for their health problems. Nevertheless, it is important to consider that in this study, participants were middle aged or older and most would have established their manhood. Therefore, they may have experienced less social pressures to prove their masculinity in comparison with younger men.

A study by Galdas, Cheater, and Marshall (2007) identified another factor that might assist some men to reject a hegemonic masculinity. Their study investigated the experiences of 36 men of white ethnicity (United Kingdom ancestry) and 20 men of South Asian ethnicity aged 30-84 who had a confirmed diagnosis of acute myocardial infarction or angina pectoris. Their findings showed that the men in their study with United Kingdom ancestry valued masculine attributes of having a high threshold for pain and discomfort. These men feared being seen to be weak by others, which contributed to delays in seeking medical treatment and led to reluctance to disclose symptoms to others. In contrast, the South Asian men did not perceive a need to adhere to these same forms of masculinity as the European men did, and consequently had a greater willingness to seek medical help. Hence, their findings demonstrate that ethnic identity can affect how males adopt different masculine attributes within their identities. These findings suggest that the

masculinity-health behaviour relationship is complex, and other researchers have elaborated that age, ethnicity, and social class can all affect the diverse characteristics that men adopt as part of their masculine identity (Broom & Tovey, 2009; Sloan, Gough, & Conner, 2010).

### **The impact of masculinities on young males**

Young males, from an early age, learn the differences between masculine and feminine characteristics (Moore, 2012). This is known as gender typing which is the process by which children acquire not only a gender identity but also the motives, values, and behaviours considered appropriate in their culture for members of their biological sex (Pederson, Richards, & Jorgensen, 2007; Shaffer, 2009). Some examples of gender typing are buying dolls and pink clothes for young girls and buying cars and blue clothes for young boys; attending to girls crying and telling boys to stop crying. The gender differences that exist in regards to socially acceptable behaviour have historical implications as heteronormative and gendered values are passed down between generations (Moore, 2012). For instance, to accomplish historical hegemonic masculine qualities some young males still 'toughen up' by being reluctant to seek medical advice, avoid looking and/or feeling vulnerable, and participate in risk taking activities. These behaviours are normally adopted to avoid accusations of being associated with un-masculine qualities (e.g., incompetent, dependent, and weak) in the eyes of their peers, family, and coaches (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002). Gender typing can be a barrier for young men in developing beliefs about health and in accessing appropriate health care. For example, McKinlay (2005) illustrated that health concerns are perceived by young men to be feminine because young women have greater access to information about their health and female relatives are more likely than male relatives to take young men to attend health services.

These findings were evident in research by O'Connor (2002), who investigated young men's conceptions of health, illness, and health care. His sample comprised 60 Pākehā male participants aged between 15 and 24. This cross-sectional study used both qualitative and quantitative methods to collect data through questionnaires and interviews. O'Connor's findings showed that some of his participants made an effort to ignore their health symptoms and delayed health care if peer pressure, team commitments, employer demands, the need to study or choice dictated that this be so. The participants referred to men as not having a great interest in health care practices and this may have been influenced by a subculture of stoicism and not wanting to look feminine, which may make them particularly prone to social pressures that discourage health care. Thus, it is no surprise that most young men have high rates of risky behaviours affected by socially mediated beliefs about masculinity (Courtenay, 1998; O'Connor, 2002). It is easy to blame individual males for these unhealthy behaviours, but as Courtenay



(1998) elaborates, the health of young males should not be dismissed as wilful neglect of their health. Sociocultural expectations of masculine behaviour can influence young males to choose behaviours and lifestyles that are unhealthy (Lee & Owens, 2002). Yet, researchers and society have largely overlooked sociocultural concepts of masculinity; therefore, at times individual males have been blamed for making unhealthy choices (Lee & Owens, 2002). Hence, parents, health care providers, and researchers need to continue to recognise and understand that sociocultural aspects like hegemonic masculinity may influence young males' individual decision making and affect health outcomes.

In conclusion, it is a well-established position that hegemonic masculinity is a contributing factor towards poor health of males with considerable evidence in morbidity and mortality statistics (Broom & Tovey, 2009; Courtenay, 2011; Lee & Owens, 2002; Mackie, 2005; McKinlay, 2005). Consequently it remains vital that health professionals and researchers are aware of the potential detrimental influence hegemonic masculine ideals has on many males to adopt behaviours and beliefs that undermine their health. Conversely, it is also important to consider that not all men believe that hegemonic masculine ideals are central to their identity. Deeper analysis of hegemonic masculinity suggests that it portrays a mono-dimensional view, which ignores the complexities that men are inhomogeneous and capable of fulfilling multiple masculinities that include healthy masculine positions. Further research is required to investigate the ways in which masculinities are deployed in both healthy and unhealthy lifestyles of men (Sloan, Gough, & Conner, 2010).

In the final section in this literature review, I consider gender disparities around the incidence of asthma and evaluate how masculinities can influence male asthma management.

### **2.6.3 The influence of masculinities on adherence to asthma treatment**

There has been little previous work on the meaning of asthma to adult sufferers and even less on young people's experiences (Gabe, Bury, & Ramsay, 2002; National Asthma Campaign, 1997; Nocon & Booth, 1990). A National Asthma Campaign completed in 1997 in the United Kingdom indicated that the views of young people were absent in the survey (National Asthma Campaign, 1997). Furthermore, Nocon and Booth (1990) also noted the small number of studies concerned with social factors in the lives of asthmatics at any age. Consequently, there was no gender-specific research obtained in this literature review that investigated social and/or masculine influences on adolescent males' asthma management. In this section, I firstly illustrate that there are gender differences in the incidence of asthma and that more young males are exposed to asthma morbidity and mortality. I then critically review a small body of literature that

investigates how social and masculine influences can affect gender disparities in adolescents' management of their chronic illnesses (e.g., asthma and diabetes).

Gender differences in the incidence of asthma vary with age and there is evidence to suggest that boys from childhood through to adolescence suffer more often from asthma than girls (Anderson, Pottier, & Strachan, 1992; Asthma and Allergy Foundation of America, n.d.; De Marco, Locatelli, Sunyer, & Burney, 2000; Nicolai, Pereszlenyiova-Bliznakova, Illi, Reinhardt, & Von Mutius, 2003; Price, 1996; University of Maryland Medical Center, 2012). Asthma diagnosis is more common in males in childhood through to adolescence, however this gender ratio reverses in adulthood (Anderson, Pottier, & Strachan, 1992; Draper & Borton, 2010). These findings are evident in Anderson, Pottier, and Strachan's (1992) results, which showed that the prevalence of asthma was higher in males up to 16 years of age, but by the age of 23 years the ratio had reversed with a substantially higher prevalence in females. It is not clear when exactly this change occurs and by what mechanism, and whether it is due to better prognosis of established asthma in boys or that males in early adulthood are underrepresented due to under reporting and or minimisation of asthma symptoms (Nicolai, Pereszlenyiova-Bliznakova, Illi, Reinhardt, & Von Mutius, 2003). Hormonal fluctuations or changes in hormone levels (e.g., pregnancy and menopause) have been identified as possible contributing factors influencing the gender disparity of asthma incidence reversal in adulthood (University of Maryland Medical Center, 2012). In addition to higher asthma diagnoses in childhood and adolescence, boys are also more likely to die as a result of asthma than girls. For instance, Price's (1996) research on the issues in adolescent asthma showed that males experienced higher mortality in all age groups studied from 0-19 years old. The biggest gender disparity was in the age group 10-14 years, where males experienced 72% of the asthma mortality. These gender differences are large, yet there is still very limited research that has explored specifically how young males experience and manage their asthma, which may contribute to their poorer health outcomes.

What is understood from the limited literature available is that most young males have a reluctance to receive medical treatment for their chronic illness in comparison to young women (Iley, 2007; Rhee, Wenzel, & Steeves, 2007; Rydström, Hartman, & Segesten, 2005; Williams, 2000a). This is because most females are better at managing their chronic illness as most incorporate their chronic illness into their social identities, disclose their illness, and treat themselves in public settings (Iley, 2007; Rydström, Hartman, & Segesten, 2005; Tollefsen et al., 2007; Williams, 2000a). These findings were illustrated in Iley's (2007) literature review of the social factors that affect the lives of children and young people who have asthma.

Iley considered the effect of gender differences and explained there are gender differences in how people view their health and deal with illness. She explained most boys viewed asthma as a stigmatising condition and subsequently some were less likely to accept that asthma is part of their identity and were more likely to minimise the effect of their illness in comparison with girls. Prout (1989) elaborated on the effects of stigma and stated that stigma is closely linked with gender and illness management. Prout completed an ethnographic study of sickness absence in an English primary school. His findings showed that illnesses like asthma could be an isolating and threatening experience for some boys, as chronic illnesses can unpredictably limit physical fitness and toughness, which are highly valued within boys' culture. Additionally, stigmatising illnesses as a form of weakness and incompetence can threaten boys' valued identity and marginalise their masculinity. Subsequently this might explain why some boys in the studies analysed by Iley (2007) were less willing to take prescribed medications and were more reluctant to respond to asthmatic symptoms in public in comparison with girls.

The results from a doctoral dissertation by Williams (1998, 2000a), explored how teenagers with asthma or diabetes negotiated responsibility for self-care with their main carer. This qualitative study individually interviewed 40 British teenagers with asthma and diabetes, 20 of whom (10 males, 10 females) aged 15 to 18 were diagnosed with asthma. Williams (2000a) found that some of her participants, especially the males, made their chronic illness an invisible part of their lives, particularly in public settings. This was achieved by the participants avoiding talking about their condition to others or not allowing their treatment to be seen by others. An adolescent male participant exemplified this when he said, "It's not what boys talk about really, not being sexist, but that's the sort of thing girls talk about, problems and things" (p. 390). Williams (2000a) elaborated that it was difficult for her male participants to express why they behaved in this way, it was perceived as 'natural' behaviour. The reluctance of many males to address their emotions may be a contributing factor, as masculine ideals reinforced by Western societies encourage males to be tough, stoic, self-reliant, and emotionally invulnerable (Cecil, McCaughan, & Parahoo, 2010; Lee & Owens, 2002). Williams findings also showed that female teenagers were more likely than males to use regular long-term preventive medication. This difference might have occurred because some young males with asthma in Ayala et al's. (2006) research believed they had outgrown their asthma and did not believe it was a serious condition. In addition, some adolescent males might undermine the importance of managing their asthma because dominant masculine values encourage men to disregard long-term health consequences (Broom & Tovey, 2009; Lee & Owens, 2002; Petersen, 1998). These gendered ideologies might explain why adolescent males find it more difficult to openly share and use their medication in public.

However not all masculine qualities had detrimental outcomes on male adolescents with chronic illnesses. Miller, Willis, and Wyn's (1993) research established that the importance of the social construction of sport and exercise to males' identity influenced the majority of the young males' participants to engage in considerable amounts of exercise, which benefited their cystic fibrosis. Additionally, in Williams' research she identified that physical activity was more important to the male participants' identity and subsequently they were generally more physically active, which had positive effects on their chronic illness. From the research obtained there appears to be a narrow range of credible masculine behaviours for adolescent males to fulfil, however it is important to consider the qualities which can be protective of their chronic illness management.

Williams' (2000a) findings are replicated in Rhee, Wenzel, and Steeves' (2007) study of adolescents' psychosocial experiences of living with asthma. Their study completed focus group interviews with 19 American adolescents with asthma aged 12 to 18 years; eight were male. The findings in their study also showed that their participants, especially males, apparently downplayed symptoms and denied any serious impact of asthma on their lives. Their findings illustrated that some participants managed their asthma by using a coping mechanism of 'toughening'. The males especially employed this coping mechanism by downplaying their asthma symptoms and pushing themselves beyond their physical limitations to portray themselves as being as capable as their non-asthmatic peers. Consequently some male participants found themselves in situations where they minimised their asthma symptoms until they became noticeable (e.g., wheeze or cough), whereas the female participants managed their asthma more proactively and communicated it with their peers. Downplaying symptoms or keeping silent about asthma has the potential to place adolescent males at serious risk of poor asthma management and compromised health outcomes. It is important to consider that the data collection method used in this study can affect the reliability of the data. Focus groups cannot guarantee participants' confidentiality therefore when sharing private or sensitive information, participants can be worried about how they appear to other members in the group and consequently may be hesitant to express their honest and personal opinions.

Gabe, Bury, and Ramsay's (2002) research contrasts with Iley (2007), Williams (2000a) and Rhee, Wenzel, and Steeves (2007) findings that teenage boys are less likely than girls to use asthma medication in public. Gabe, Bury, and Ramsay (2002) studied 55 British participants aged 11-16 diagnosed with asthma; the sample had almost equal number of male and female participants. Their findings indicated that both boys and girls appeared open about using their medication in public. They explained the reason for the limited gender disparity might be associated with the high incidence of people the participants knew who had asthma.

Recognised commonality of a chronic illness can help reduce stigma and isolation via normalisation, which may have encouraged the boys in their study to be more open about their asthma in public. Gabe, Bury, and Ramsays (2002) findings are intriguing and additional investigation should be completed to ascertain if increased internalisation of the commonality of asthma can help reduce the stigma of asthma and encourage males to incorporate and manage their asthma in public.

In summary, it is evident that more young males compared to females are affected by asthma, yet studies specifically investigating how young males experience and manage their asthma are limited. What is understood from Iley (2007), Rhee, Wenzel, and Steeves (2007) and Williams' (2000a) research is that some young males may distance themselves from their asthmatic condition in public. The interplay of multifaceted influences and the unpredictability and uncertainty of chronic illnesses can threaten their masculine identity characterised by hegemonic values of self-control, independence, and self-sufficiency. Consequently, because of the potential threat chronic illnesses posed to their masculine status, some adolescent males were more reluctant to incorporate their asthmatic condition into their social identities, disclose their illness, and treat themselves in public settings. However, Gabe, Bury, and Ramsay's (2002) contested these findings in their research and suggested gender disparity in public asthma management was minimal. They explained the divergence in findings might be associated through commonality of asthma noted by the participants, which may have reduced stigma and helped the male participants to be more confident about publicly disclosing their asthmatic condition. A limitation of the studies analysed were the small sample size of adolescent male participants with asthma, with only one study having more than 11 male participants. Hence, further research is required to investigate how asthma specifically affects adolescent males' lives.

## **2.7 Literature review summary**

In conclusion, there is international evidence to suggest that social influences can affect adolescent asthma medication adherence. Adolescence is a stage in life when ‘fitting in’ with others is paramount; therefore, most adolescents with asthma want to be perceived as normal and/or are worried about peer acceptance. The media is an influential medium and can exacerbate negative messages for people with asthma and influence peer acceptance. The media usually represented clear distinctions and portrayals between people with and without asthma, and drew associations between people with asthma and undesirable characteristics.

These characteristics demonstrated social exclusion, discrimination, and distancing of people with asthma. To fit in and minimise the stigma of asthma, some adolescents tried to pass as non-asthmatics to preserve their reputation as a ‘normal’ adolescent through downplaying their asthma symptoms and/or minimising medication use in public. Some of the acquired literature asserted that external peer pressure influenced adolescent asthma management, however the evidence to support this accusation was limited, therefore it was unclear as to whether explicit peer pressure is a significant influence on adolescent asthma management. Additionally, most of the research analysing social influences on asthma medication adherence was international, quantitative methods were utilised, and studied populations were female dominant.

Consequently, there was limited gender specific national research. There is a need for more exploration to understand how social influences may affect males and/or females asthma management within New Zealand’s cultures and environments.

Furthermore, most of the research on the health of males focused on comparisons between the health of men and women. Fortunately there is a growing research base on sociocultural aspects of men’s health, which is urgently needed given the paucity of current data. Research suggests that males have less healthy lifestyles and are engaged in far less health-promoting behaviours compared to females. The group most at risk due to these detrimental lifestyles and behaviours was young males. Consequently, it was comprehensible that more males experienced premature mortality and had a shorter life expectancy than females. Hegemonic masculinity was established as a contributing factor towards these statistics. Most males from Western civilisations desired to achieve hegemonic masculine qualities at the risk of adverse health outcomes, but not all males fulfilled these ideals. The scope of what it means to be a man is increasing; however, hegemonic ideals still affect the majority of males from Western civilisations to adopt behaviours and beliefs that undermine their health. It was apparent that more young males compared to females were affected by asthma yet it was still unclear how masculinities and social implications specifically affected male adolescents’ asthma acceptance,

treatment adherence and management. What was understood is that some young males might distance themselves from their asthmatic condition in public because of the threat asthma poses to masculine ideals. However, not all the research obtained agreed with that assertion hence further research is justified and indeed required. Research and evidence pertaining to specific health experiences of adolescent males was especially limited; consequently, there is limited published research that has investigated what it is like to be an adolescent male living with asthma. Therefore, the purpose of this research is to explore how male adolescents understand and manage their asthma symptoms.

The focus of the next chapter will be on the selected study design and the research methods I deployed to help understand the perspectives of male adolescents' asthma medication adherence.

## **Chapter Three:**

### **Methodology and Methods**

The aim of this study was to explore how male adolescents understand and manage their asthma symptoms. Given the relative insufficiency of information on male adolescent asthma medication compliance I proposed the following research question: how do perceptions of masculinity influence asthma management of adolescent males? The influence of masculinities can vary between countries, cultures, and social organisations; therefore, in this study it was important to develop a specific understanding of what it is like to be a male adolescent living with asthma in Christchurch, New Zealand. The objective of this study was to answer the research question by exploring and describing male adolescents' perceptions of masculinities and societal influences and how these understandings affect their interpretations and management of asthma symptoms.

In this chapter I will first outline why qualitative descriptive methodology is the most appropriate to answer this research question and provide a rationale for the methods process. The methods section outlines the inclusion criteria, recruitment, data collection, data transcription, and analysis. To complete this chapter I describe how I established trustworthiness according to Lincoln and Guba's (1985) criteria for qualitative research.

#### **3.1 Methodology**

Research and understanding of male adolescent asthma symptom management is limited. Accordingly, to address this knowledge deficit it was imperative to integrate a qualitative research methodology by interviewing male adolescents' with asthma and describing their experiences. Qualitative research enables researchers to question meaning, examine social processes, and identify barriers and facilitators to change (Starks & Trinidad, 2010). Furthermore, qualitative research can illuminate lay understandings and practices within specified social contexts and may complement and/or challenge quantitative data (Gough & Robertson, 2010). I selected and implemented qualitative research for this study because it had the capacity to support an understanding of the participants' perceptions surrounding asthma (Neergaard, Olesen, Andersen, & Sondergaard, 2009). In this research, a qualitative descriptive study design was implemented. QD design incorporates a naturalistic approach by researching the studied population in its natural setting and aims to acquire and describe participants' perceptions and experiences of the world and its phenomena (Neergaard, Olesen, Andersen, & Sondergaard, 2009). According to Sandelowski (2000), QD design facilitates a "comprehensive



summary of an event in the everyday terms of those events" (p. 336). Spencer, Krefting, and Mattingly (1993) further suggest that the intention is to describe the human experience in the participants' own language in everyday situations. QD study design was selected for this study because it can encourage the understanding of individual experiences and the meanings that they make of their experiences (Suzuki, Ahluwalia, Kwon-Aurora, & Mattis, 2007) and has been used previously to research social influences on adolescent asthma medication adherence (Rhee, Wyatt, & Wenzel, 2006).

QD design differs from other qualitative methodologies such as grounded theory which focuses on theory development of a social experience and phenomenology which derives meaning of the lived experience (Neergaard, Olesen, Andersen, & Sondergaard, 2009). The aim of qualitative description is to obtain rich descriptions, usually expressed in the words of the participants (Magilvy & Thomas, 2009; Neergaard, Olesen, Andersen, & Sondergaard, 2009). Accordingly QD design stays close to the original meaning of the data, in comparison other qualitative methods often go beyond the surface of the data and examine causes and patterns of the participants' which risks losing the distinct meaning of the participants' data (Neergaard, Olesen, Andersen, & Sondergaard, 2009). QD design was most suited to this study because it was the intention to gain rich descriptions of male adolescents' experiences of their asthma medication management. Because there is limited research and understanding of this phenomenon, qualitative description was an important method to facilitate insight into the participants' beliefs and understandings. QD design supported a data collection process where I could listen to personal experiences and then present realities from the participants' points of view, which allowed me to gain an insight as to what it is like to be an adolescent male living with and managing asthma. I anticipated that time and resources would be limited because of the post-earthquake limitations in Christchurch. Therefore, it was beneficial to use this method because it was more feasible in comparison to other qualitative designs and did not rely on large sample sizes necessary for other methodologies (Magilvy & Thomas, 2009; Neergaard, Olesen, Andersen, & Sondergaard, 2009). In conclusion, QD methodology is best suited to this study because it addresses the knowledge deficit by ascertaining an in-depth and detailed description of male adolescents' beliefs, interpretation, and management of their asthma symptoms.

### **3.1.1 Sample selection**

Sandelowski (2000) recommended that in any qualitative study the ultimate goal of purposeful sampling is to obtain cases deemed information-rich for the purpose of the study. I selected high school aged participants for this study because the majority of the participants under investigation attended high school and they could provide the required data to answer the research question. Additionally I have previous personal, teaching, and research experience with the specified demographic. Dickson (2008) elaborated that having an understanding of the phenomena under investigation can support the trustworthiness of the research by increasing the probability of actually understanding the participants' experiences.

### **3.1.2 Sample size**

Magilvy and Thomas (2009) indicated "a typical sample size for a qualitative descriptive study may be as few as three to five persons, ranging up to about 20 participants" (p. 299). The projected sample size in this study was between 5 and 15 participants because it was consistent with Magilvy and Thomas's (2009) recommendation and other sample sizes in similar qualitative research (Kvale, 1996; Starks & Trinidad; Suzuki, Ahluwalia, Kwon-Aurora, & Mattis, 2007). It was expected that data saturation would be achieved by interviewing the selected sample size. Data saturation is a tool used to ensure that adequate and quality data is collected to support the study and saturation is achieved when the collection of new data does not shed any further light on the phenomenon under investigation (Mason, 2010; Walker, 2012).

### **3.1.3 Sampling strategy**

Sandelowski (2000) challenges researchers to defend the plausibility of their sampling strategy as reasonable for their purposes. I used snowball sampling within this study; snowball sampling is a technique of obtaining a research sample where existing study subjects recruit future subjects from among their acquaintances (Emmanule, n.d.). I utilised this technique at the end of each interview by asking participants if any of their male high school peers, who have asthma, would be interested in participating in this study. If the participant responded positively, I suggested that the interested friend/s should get in contact with the nominated teacher for more information. This was beneficial in accessing other male adolescents who may have experienced potential peer perception as a barrier, thus influencing their participation in this study. Snowball sampling was a useful strategy to gain further participants, because once the participant shared their experience, other potential participants appeared more confident to consent and participate. This was evident after I completed the initial interviews at the first high school, a further two participants approached the designated teacher and participated because of the initial interviews.

### **3.1.4 Interview strategy**

Interview methods are common across qualitative research and were selected for this study because personal interviews are appropriate to acquire insights into men's constructions of health which are fascinating, grounded, and rich (Gough & Robertson, 2010). One-on-one interviews enabled confidentiality and avoided the potential negative influences and limitations of being with their peers within focus groups (in which participants may be hesitant to participate, feel pressured, or affected by dominant individuals influencing the group). I undertook the interviews using open-ended questions as this supports participants to impart the data in their own words (Polit, Beck, & Hungler, 2001). I selected this interview strategy for this study because it was flexible, minimally intrusive, and encouraged participants to share their stories in their own words, which developed richly informative descriptions of the participants' beliefs, interpretation, and management of their asthma symptoms (FAO, 1990; Lee & Owens, 2002; Neergaard, Olesen, Andersen, & Sondergaard, 2009).

### **3.1.5 Analytical process**

In this study, it was important to analyse and report data that was reflective of participants' experiences in a dialect similar to the participants' own language (Neergaard, Olesen, Andersen, & Sondergaard, 2009). Therefore, I used thematic analysis [TA] to analyse and interpret the data. TA is a process that "reports experiences, meanings and the reality of participants" (Braun & Clarke, 2006, p. 81). I chose a semantic approach because I did not want to analyse beyond what a participant had said, and to ensure I represented an accurate description of the participants' data. TA was selected for this study because it was a suitable analytical process that has been used within similar qualitative research (Braid, 2010; Koome, Hocking, & Sutton, 2012). It was also appropriate for answering the research question and objective because TA supported a rich and detailed account of male adolescents' beliefs, interpretation, and management of their asthma symptoms (Braid, 2010; Braun & Clarke, n.d.; Braun & Clarke, 2006).

## **3.2 Methods**

### **3.2.1 Inclusion criteria**

Potential participants were adolescent males (12-19 years old) who spoke English, attended high school, and lived in Christchurch, New Zealand. Participation was open to any ethnic background, however fluent English was important to enhance communication and support the accuracy of data collection and analysis. Another criterion for the potential participants included experiencing asthmatic symptoms, which had affected their life within the last year.

### **3.2.2 Recruitment**

I commenced recruitment in February 2013 after I obtained ethics approval from the University of Canterbury Human Ethics Committee (Appendix A). I identified and made contact with six high schools in Christchurch. Personal teaching experience and/or contacts at these schools were the primary reason for their selection. I emailed administration staff the consent and information sheets (Appendices B and E) and requested distribution to appropriate staff (e.g., principal, deputy principal, or dean) for consideration. Three high schools responded positively to the request to participate. I held individual meetings with the teachers and/or principals who expressed interest and explained the study. Subsequently all three schools (two co-educational [co-ed], and one single sex) agreed to participate in this study.

Once an appropriate member of each school consented to the research, I organised an additional meeting with the nominated contact person at the school. I explained the research procedures and provided participant/parent consent and information sheets (Appendices C, D, F, and G).

I volunteered my services to recruit through the schools via a range of recruitment methods, which consisted of daily school notices, school newsletters, posters, social media (Facebook), and e-mailing. As a registered teacher, I originally thought I would be able to advertise my research independently within the schools, but some of the teachers/principals highlighted possible ethical implications, which influenced me not to proceed in this way. This response was understandable and may have been compounded by the post-earthquake implications, which left the majority of school staff feeling overworked and stressed. Consequently, I supplied recruitment posters (Appendix H) and a newsletter/daily notice template (Appendix J) to the teachers to support recruitment. The nominated teachers were confident they would be able to recruit by displaying the posters, advertising in the newsletter/daily notices, talking about the research in class, and passing around some of the information sheets for other teachers to hand

out. To increase the participation of a historically hard to reach and understudied population I also offered an incentive of a prize draw for a tablet computer for participating in the study.

Once receptive participant/s had contacted the teacher, they were given a physical copy (provided by the teacher) of the information sheet and consent forms. A completed parental/caregiver consent form needed to be returned to allow participation in the study. I provided prepaid envelopes and I allowed the opportunity to electronically scan and return the consent form via email. Fifteen participants from the three different High Schools appropriately responded to the recruitment strategy; however, feedback from teachers suggested that returning consent forms was a constraint to additional recruitment. The returned forms were generally sealed in the prepaid envelope and given to the selected teacher; no consent forms were returned via mail or scanned through email. After receiving the returned consent forms, I organised with the nominated teachers the location and time of the interview/s, the teachers then informed the participants. The participants had the opportunity to email me or contact the teacher to arrange a different time if the slot offered was not convenient.

### **3.2.3 Data collection**

I conducted the data collection through semi-structured, individual interviews. For the interview process, I required an individual room at each school to maintain the confidentiality of the participants. I organised the interviews in class time and within school hours to increase the rates of participation. I asked for permission within the consent form for participants to be excused from class for the 30-40 minute interview. If I was managing more than one interview at the same location, I allowed 10-15 minutes between interviews to facilitate reflection and record observations (e.g., body language and cues for further questions to ask). At the start of the interview, I reminded participants of the purpose of this study and the key points from the study information sheet, emphasising that they could choose to end the interview at any time and were under no obligation to answer any question with which they felt uncomfortable. I explained to the participants that the information they provided would be confidential and their anonymity would be maintained through the use of pseudonyms. Participants were reminded that the interviews would be recorded on a digital voice recorder (which was explained prior in the consent forms). To verify confirmation, I obtained verbal consent to the voice recording.

Throughout each interview, I was conscious of how the participant may view me; I wanted to uphold the balance of leading the conversation while maintaining a positive rapport with the participant. To achieve this I wore smart-casual clothes (e.g., jeans and a t-shirt) to reduce any perceived power imbalance. I was mindful that as I guided and directed the situations and topics,

I also needed to keep the language to an age-appropriate level. The procedures of the semi-structured interview initially consisted of an introduction and a guided discussion. When communicating the interview questions I started with a few introductory questions (e.g., what is your favourite television show at the moment?) to develop the student's confidence and enhance rapport. I followed with introductory statements to gain a general perception and knowledge surrounding their asthma (e.g., can you please tell me what it is like to have asthma?). I proceeded to ask about each participant's knowledge and understanding of asthma (e.g., what do you understand asthma is?). I had to reassure some participants that I was not testing their knowledge, rather that I was interested in seeking their own perspectives. I progressed to ask their views of gendered issues relating to asthma (e.g., do you think it is more difficult for females, males, or both to talk about and manage their asthma? Why?). The last questions focused on the social impacts of their asthma (e.g., do any of your friends have asthma?). Once I had finished the guided discussion with the particular participant, I offered an opportunity for the participant to add any further information they felt was relevant. I then explained in brief how the data would be analysed and thanked them for their participation. I also offered each participant a summary of the results via email or mailed to their physical address (if provided in consent form); however, none of the participants requested a summary of the results. I finally asked each participant if any of their male high school peers, who have asthma, would be interested in participating in this study. If the participant responded positively, I suggested the interested friend/s should contact the nominated teacher for more information. As a result of the snowball sampling strategy I was informed that two potential participants had contacted a designated teacher.

Once I had completed 12 interviews I tested the consistency of the collated data, ideas, and themes to identify if data saturation was achieved. I tested the data by comparing interviews from different high schools and the same themes and information were emerging. To validate if data saturation was achieved I completed three additional interviews and no new data was discovered, thus I stopped recruiting new participants because I was confident after interviewing 15 participants I had reached data saturation and the inclusion of additional participants was unlikely to generate any new ideas. Once the 15 interviews had been completed, the audio data was transferred to a computer with separate passwords protecting access to the computer and the folder containing the data.

On completion of the data collection, I individually emailed each participant to thank them again for their participation and indicated the winner of the tablet computer would receive an additional email. I held a random draw for the tablet computer. I used an internet site

([www.limmy.com/playthings/raffleking/](http://www.limmy.com/playthings/raffleking/)) which provided random draws, by assigning participants' names to numbers then randomly generating a number to which a name was assigned. On completion of the draw I emailed the winner to inform him that he had won the tablet computer and sent the tablet computer to the winner's physical address, which was included on the consent form.

### **3.3 Data analysis**

#### **3.3.1 Transcription**

Gibbs (2002) believed the best way to reduce errors is to transcribe one's own audio data, because the context of the interview and the subject matter are familiar. I cautiously transcribed all the interviews, as I was aware transcription is a change of medium, which involves the transformation of the data (Kvale, 1988). When moving from the spoken context of an interview to the typed transcript there are, as Kvale (1988) suggests dangers of superficial coding, decontextualization, missing what came before and after the participants' account, and what the larger conversation was about (Gibbs, 2002; Kvale, 1988). I reviewed this potential for bias and considered it when transcribing and completing posttranscriptional checks to maintain the credibility of the data analysis. When completing the transcriptions of the data I used two computer monitors originating from one machine; on one monitor, Microsoft Word was open and I typed the translated audio data, and on the other monitor, I played the audio files through Windows Media Player. I listened to the audio data by plugging in headphones to the computer to avoid distractions.

I set a standard of listening to a question and response two or three times in slow speed (play speed 0.5) which allowed sufficient time to type and articulate the participant's response. I moved the play speed slightly (0.5-0.8) depending on how clear the participants responded (e.g., accent, pronunciation, cadence, and rhythm) and the background noise. I would then re listen in normal speed (play speed 1.0) to verify I had accurately transcribed the data. This allowed me to repeatedly hear the specific question and answer. Once I was confident, I had accurately transcribed the data I moved onto the next question and completed the same processes. As I progressed, I excluded what I perceived as irrelevant data (e.g., talking about computer games), if this occurred I made a note of it within the transcription. I transcribed the voice-recorded interviews verbatim, but once transcribed I modified some of the data into more formal written styles to make it easier to read, analyse, and for the purpose of the written results. I was careful to ensure when I was modifying the transcripts that the data did not lose the feel for the participants' expression, as within QD design it is crucial to stay close to the data and

describe participants' experiences in a language similar to participants' own language (Neergaard, Olesen, Andersen, & Sondergaard, 2009). Once all the transcriptions were completed, I compared each transcription and observation notes against the audio data to verify authenticity and accuracy of the transcription (e.g., typing errors and misspellings). I conducted posttranscriptional checks for the accuracy of the transcription process as Suzuki, Ahluwalia, Kwon-Aurora, and Mattis (2007) suggested that transcribers or researchers are vulnerable to errors or biases.

### **3.3.2 Analytical procedure**

Once I transcribed the data, I incorporated the method of thematic analysis to analyse and interpret the data. I used the existing framework of the six analytical phases in TA by Braun and Clarke (2006) as the premise for organising the data in a methodical way. The six analytical phases consist of: 1) familiarising with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report (Braun & Clarke, 2006). In preparation for TA, I printed the transcriptions using double spacing and wide margins, so that it was possible to write codes and notes on the hard copies.

#### **1) Familiarising with the data**

The first phase was to familiarise myself with the data. I achieved this by carefully reading the entire data set. I re-read all the transcriptions, and highlighted key terms, events, or actions for each.

#### **2) Generating initial codes**

In the second phase, I made an initial coding list that summarised these events without trying to fit a pre-existing coding frame, or to incorporate my preconceptions. This process of inductive analysis involved coding statements relating to the initial coding list, by circling the specified text and assigning a code, which I highlighted in different colours. I then noted the codes, and each relevant statement was organised under its appropriate code. Once I was confident that the initial codes were beginning to identify some data patterns, I moved onto phase three identifying themes from these codes.

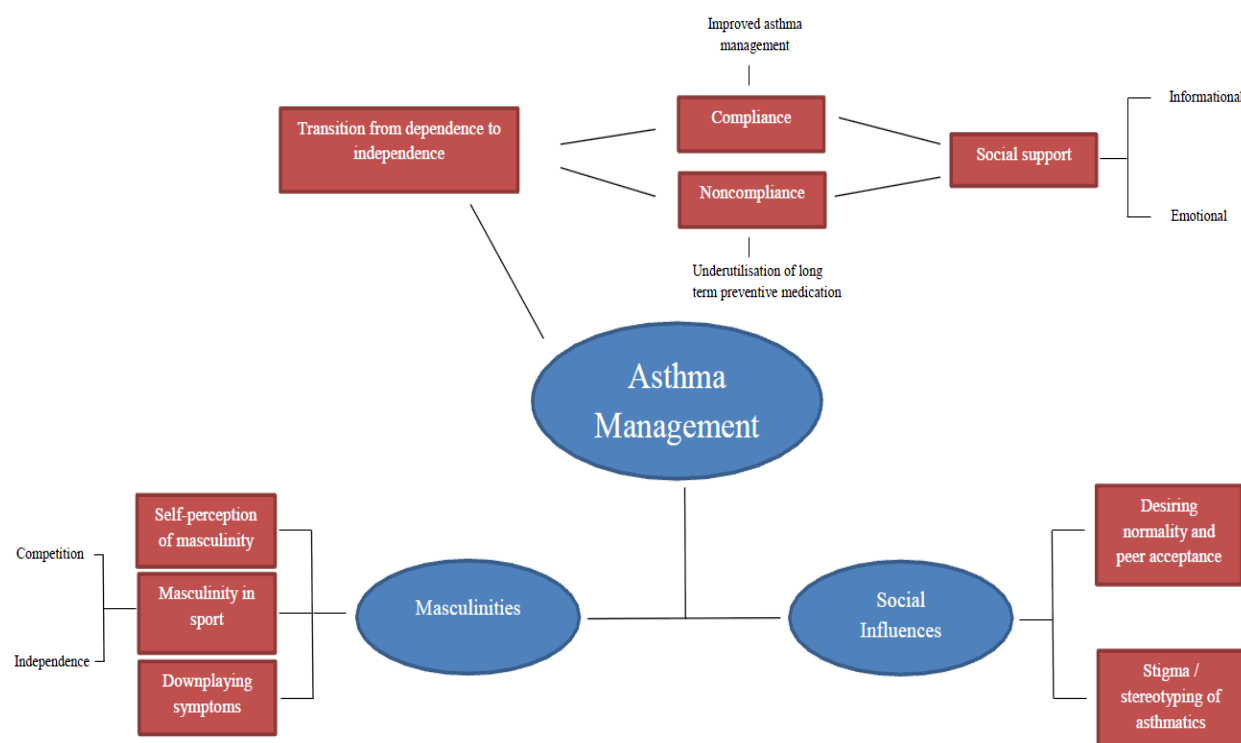
#### **3) Searching for themes**

When initially identifying themes I incorporated a semantic approach; this is where the researcher does not look beyond what the participant said, and this allowed me to establish themes from the surface meanings of the data (Braun & Clarke, 2006). I created a mind map



(Figure 1) to organise the codes into potential themes and sub-themes. A mind map is a diagram used to represent concepts, ideas, or tasks linked to and arranged radially around a central key word or idea (Burgess-Allen & Owen-Smith, 2010). I used mind mapping in this study to demonstrate a visual representation of the codes to help categorise different codes into possible themes and sub-themes. Themes identified the major patterns and ideas surrounding the collected data and topic while the sub-themes included more concrete and illustrative examples.

**Figure 1: Initial mind map**

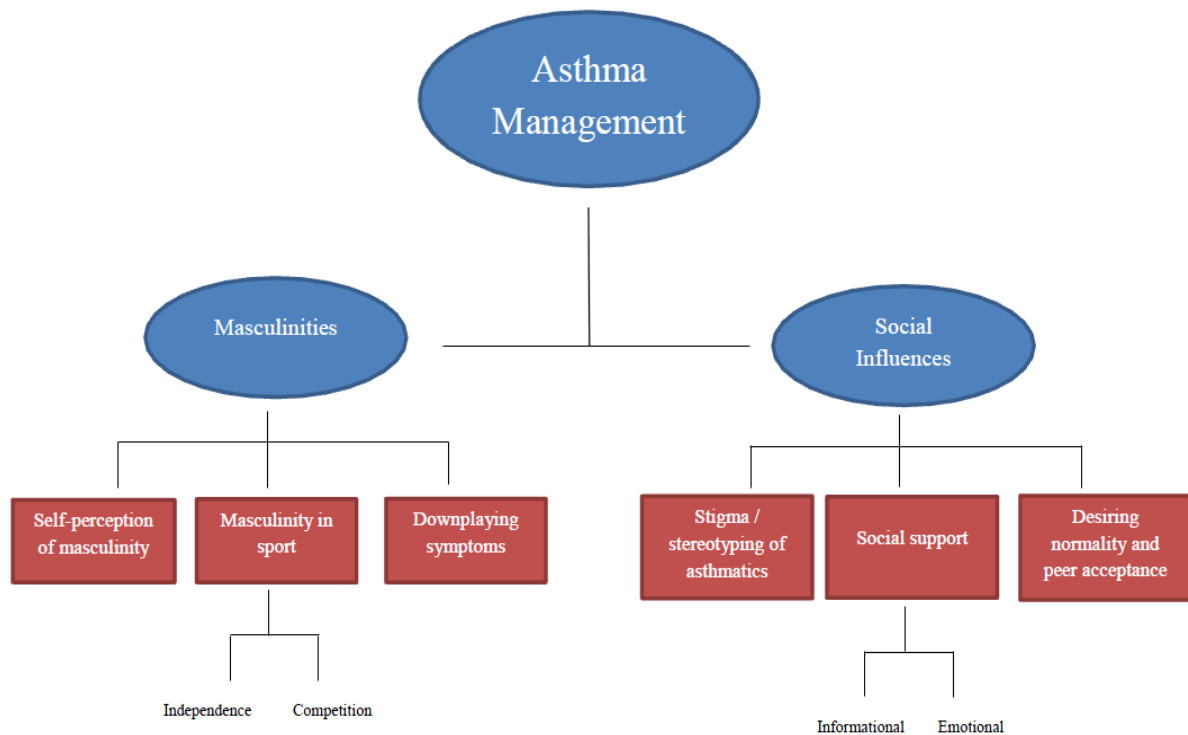


#### 4) Reviewing themes

In the fourth phase, I looked for patterns and explanations in the themes. For example, I checked if I could collapse certain themes together to form one theme. This was to make sure the themes had enough supporting data and there were identifiable distinctions between them. I went through all the transcriptions electronically using Microsoft Word and used the search navigation tool that derives key words entered into the search bar. I typed in the key codes within each theme to establish if any additional, yet not previously revealed raw data was present to strengthen the themes. I reviewed the themes by checking them against the transcriptions and my written observations to determine if the themes summarised the participants' experiences. I then updated the mind map (Figure 2) with the amended themes and sub-themes and I was confident

that the themes were reflective of the participants' experiences and could assist in answering the research question.

**Figure 2: Finalised mind map**



## 5) Defining and naming themes

The fifth phase was to define and name the themes; I completed this process in consultation with my supervisors to maintain trustworthiness. We discussed the mind map and once the themes were agreed, three overall themes emerged. I then finalised the scope and focus of each theme, determining how each theme portrayed a distinctive story of the participants' beliefs, interpretation, and management of their asthma symptoms.

## 6) Producing the report

In the sixth phase, I completed a final report that included descriptions of each theme with supporting quotations from the original data. I will illustrate the final report in the Findings chapter.

### **3.4 Trustworthiness**

Trustworthiness can be measured by criteria that show the quality of a study and its findings. Guba's (1981) model identified four aspects of trustworthiness. The four aspects consisted of: 1) truth value, 2) applicability, 3) consistency, and 4) neutrality. The criterion is appropriate for both quantitative and qualitative research, however due to the philosophical and conceptual divergence between the two approaches Guba argued that the criterion must be defined differently for quantitative and qualitative research (Krefting, 1991). Subsequently Lincoln and Guba (1985) created four aspects of trustworthiness suitable to qualitative research. The qualitative criteria includes: 1) credibility, 2) transferability, 3) dependability, and 4) conformability. Lincoln and Guba's (1985) criterion was used for this study because it is conceptually well developed to ascertain trustworthiness in qualitative research and has been used previously by other qualitative researchers (Gunersel, 2009; Krefting, 1991; Lu, Wong, & Mu, 2011; Mathibe-Neke, 2008).

To demonstrate how trustworthiness was present in this qualitative descriptive study, I will explain how I considered Lincoln and Guba's (1985) four aspects of trustworthiness within the research procedures.

#### **3.4.1 Credibility and Conformability**

Lincoln and Guba (1985) argue that ensuring credibility is one of the most important factors in establishing trustworthiness. To establish credibility and conformability within this study I incorporated a strategy called reflexive analysis (Krefting, 1991; Shenton, 2004). Reflexivity refers to assessment of the influence of the researcher's own background, perceptions, and interests on the qualitative research process (Krefting, 1991; Ruby, 1980). In qualitative research, the researcher is a participant, not merely an observer (Krefting, 1991). The researcher's background dictates the framework from which the researcher will organise, study, and analyse the findings (Agar, 1986). Therefore, it was important to implement a strategy of personal reflexivity to understand how my beliefs, values, perceptions, and interest could influence my research processes. As a male and recent adolescent, primary researcher, an asthmatic and having experienced teaching teenagers, I was mindful of my own preconceptions about my research topic. I reflected on my assumptions after each interview and wrote down my personal thoughts and feelings. My personal and teaching experience supported an understanding of the phenomena under investigation and increased the credibility of the research by enhancing the understanding of what the participants' experienced and described. I appreciated that I am not an adolescent anymore and recognised that adolescents have different meaning systems

compared to those of adults. I exercised caution in assuming I had an understanding of adolescent cultures because of recent personal experiences of adolescence (Dickson, 2008).

Personal bias had an influence on this study and I endeavoured to minimise the impact by reading and interpreting the raw data to form the initial coding list, instead of relying on my noted observations. This inductive approach helped maintain conformability by demonstrating that the findings emerged from the data and not my own predispositions (Shenton, 2004). I also incorporated a qualitative research technique consistent with phenomenological method to help maintain the credibility of the data (Daniels, 2005). I used bracketing to highlight my preconceptions and biases before beginning the data collection. When I completed the interviews, I attempted to suspend my personal thoughts and endeavoured to be open to what the participant wanted to share (Daniels, 2005). Bracketing mitigated some personal bias and influence on the participants, and more importantly, it facilitated deeper personal levels of reflection across all stages of this study. The opportunity for sustained in-depth reflection improved my confidence that I had accurately recorded the phenomenon under investigation.

### **3.4.2 Transferability and Dependability**

Transferability and dependability criteria are based on showing how the findings are consistent and could be repeated and compared within other contexts. Transferability is the ability to provide the reader with sufficient information to be able to transfer the findings to other contexts or settings. I achieved this by explaining the background data in the methods section, to establish the context of the study. I then thoroughly collated and analysed the raw data while staying as close as possible to the context and meaning portrayed by the participants. I achieved this by obtaining data through semi-structured interviews, which supported dialogue in the participants' own language, and by completing an inductive analysis to derive specific examples of participants' lived experiences. I incorporated these methods to promote enhanced understanding of the phenomenon under investigation and to provide an opportunity to compare the instances of the phenomenon described in this study with those that have emerged in other situations (Shenton, 2004). This study cannot be replicated exactly; variability is expected in qualitative research because of different backgrounds and interpretations of the researcher. Thus, it was important to complete a concise methodical process consistent with the selected methodology, to maintain dependability and to ensure the study processes could be replicated. In conclusion, to maintain trustworthiness within this study I carefully identified and minimised any potential negative effects on the data. I consistently followed the processes of qualitative description within the methods process. I incorporated reflexivity within the research procedures to increase

awareness of my personal biases and I incorporated other QD researchers' principles and experience within the methodology to allow my process to be replicable.

The analysis in this study identified key themes relating to the impact on masculinities and societal influences on male adolescents' interpretations and management of asthma symptoms. I will explore these themes in detail in the Findings chapter.

## **Chapter Four:**

### **Findings**

This chapter presents information disclosed by the participants regarding their perceptions of masculinities and societal influences and how these understandings affected their interpretations and management of their asthma symptoms. In this chapter, I will firstly provide the background to the participants by analysing their demographic details. I follow this with a description of the themes I ascertained in the analysis; I will then examine the themes in detail to depict the participants' beliefs surrounding societal and masculine influences on their asthma medication management. Lastly, I will provide a summary of findings.

#### **4.1 The participants**

Fifteen male high school students (year 9-13) aged between 12 and 17 years partook in the semi structured interviews, six participants were juniors (12-14 years old) and nine were seniors (15-17 years old). The participants were recruited from three different types of high schools, state funded, special character, and 'state integrated' based on religion. Two high schools were co-educational while the other was a single-sex school; the schools also differed in geographical location with two high schools based in the city while the other was rural. The high schools decile ratings ranged from six to eight. School decile ratings are used by the Ministry of Education [MOE] to indicate the extent to which it draws its students from low socio-economic communities. There are 10 deciles, the lower a school's decile rating the higher percentage of students are from low socio-economic communities (MOE, 2013). The decile ratings indicated that the participants came from high schools with students from higher socio-economic communities. The participants were culturally diverse with nations of origin including Holland, Zimbabwe, and Samoa, as well as New Zealand born participants of European and Māori descent. The average interview length was 14 minutes, the longest interview was 20 minutes and the shortest was 7 minutes. The participants from herein are referred to individually by using their pseudonyms.

**Figure 3: Participant background information**

Participant	School Year (approximate or actual age)	Ethnic Group	School Gender	School Decile Rating	Interview Length
1	Year 12 (16-17)	Pākehā	Co-ed	6	16 minutes, 30 seconds
2	Year 9 (13-14)	Dutch	Co-ed	6	19 minutes, 54 seconds
3	Year 12 (16-17)	Pākehā	Co-ed	6	17 minutes, 7 seconds
4	Year 11 (15-16)	Pākehā	Co-ed	6	17 minutes, 49 seconds
5	Year 11 (15-16)	South African	Co-ed	6	19 minutes, 11 seconds
6	Year 12 (16-17)	Pākehā	Co-ed	6	12 minutes, 57 seconds
7	Year 11 (15-16)	Pākehā	Co-ed	6	13 minutes, 38 seconds
8	Year 10 (14-15)	Pākehā	Single-sex	8	9 minutes, 27 seconds
9	Year 9 (12)	Pākehā	Single-sex	8	10 minutes, 13 seconds
10	Year 12 (16-17)	Samoan	Single-sex	8	15 minutes, 38 seconds
11	Year 10 (14)	Pākehā	Single-sex	8	15 minutes, 34 seconds
12	Year 10 (14)	Pākehā	Single-sex	8	6 minutes, 56 seconds
13	Year 9 (13-14)	Pākehā	Co-ed	6	9 minutes, 22 seconds
14	Year 12 (16-17)	Māori	Co-ed	6	7 minutes, 19 seconds
15	Year 12 (16-17)	Pākehā	Co-ed	6	15 minutes, 5 seconds

Ethnic Group Key	
Pākehā	New Zealanders of European ancestry
Māori	Indigenous people of New Zealand
South African	An Afrikaans-speaking South African of European ancestry
Dutch	Native to the Netherlands
Samoan	Polynesian, from the Samoan Islands

## 4.2 Themes

Thematic analysis identified two main themes and related sub-themes (Figure 4). The first theme ‘social influences’ included three subthemes; stereotyping and stigma of asthmatics, desiring normality and peer acceptance, and social support. The second main theme ‘masculinities’ contained three subthemes; describing the influence of masculinities, how historical hegemonic masculine ideals (e.g., independence and competition) are replicated within the context of sport, and how perceived masculine expressions influenced participants’ asthma medication management.

**Figure 4: Themes from participant interviews**

Themes	Sub-themes
<b>Social Influences</b>	<ul style="list-style-type: none"><li>• Stereotyping and stigma of asthmatics</li><li>• Desiring normality and peer acceptance</li><li>• Social support (informational and emotional)</li></ul>
<b>Masculinities</b>	<ul style="list-style-type: none"><li>• Participants perceptions of masculinity</li><li>• Masculinity in sport (independence and competition)</li><li>• The influence of masculinities on asthma medication management (downplaying symptoms)</li></ul>

The objective of this chapter is to reveal the rich descriptions by the participants in a comprehensive and coherent manner. I will first disclose the information about the participants’ perceptions of social influences on their asthma medication management (Figure 4). I will then proceed to uncover the participants’ perceptions of masculinities, mainly represented through the context of sport and depict how desired masculine attributes influenced participants’ asthma medication management.



## 4.3 Social influences

The social influences theme relates to the participants' view of the influences from others (e.g., peers, family, and teachers) and society (e.g., media and school). It also explores how these external factors may have influenced personal emotions, opinions, or behaviours pertaining to their asthma medication compliance.

### 4.3.1 Stereotyping and stigma of asthmatics

This subtheme revealed the participants' views regarding the portrayal of asthmatics by the media and how these representations influenced their asthma medication adherence.

Throughout the interviews, it was evident that the participants thought the media coverage of asthma was infrequent:

“Not much on the TV, not really barely any on the TV.” (Wade)

The majority of the participants believed when asthma was portrayed in the media, on television, or in movies that the image of asthmatics was as a ‘nerd’ or ‘geek’. Seven participants believed there was a stereotype of asthmatics within the visual media that contained a negative stigma.

Bryson said, “I’ve never really seen a normal character, for example a GI Joe character that has asthma; it’s always like a Milhouse.”

Milhouse is a character in the television show the Simpsons. He is an asthmatic with glasses who is portrayed as a nerd with low self-confidence and is constantly bullied by his peers. In comparison a GI Joe character is the complete opposite to Milhouse, he is confident, physically fit, muscular, and strong.

On other occasions where characters were represented as asthmatics the participants described the characters as being in non-starring roles with unattractive physical features like braces and glasses with characteristics of being physically disabled, unfit, small, and scrawny. Three participants sighed after exclaiming that the asthmatic character is never the star of the show, a role model or an ‘everyday’ person; the character with asthma is mostly used as comic relief and to highlight the strengths of the main character, by their inadequacies.

It’s like a comedic character, it’s kind of mocked, the kid/person with asthma is always the mocked kid, or the side kick. Never the main character, never like a role model. They are the comic relief person just trying to make people laugh not a serious person, it’s not like they really care about the person that has it. (Justin)

“When they are portrayed as asthmatics they seem to normally be very nerdy kids. They don’t tend to show an everyday person that has it.” (William)

These participants suggested these insights did not portray an accurate description of reality and the role of the asthmatic was exaggerated. As a result, the participants reflected that society as a whole does not take asthma seriously and care about people with asthma. The participants wanted the media to show that asthma is a serious condition and not a joke and people with asthma are capable of living ‘normal’ lives and to have starring roles.

A few participants were worried that these representations of asthmatics made asthma sufferers seem ‘dumb’, ‘dependent’, and ‘weak’ and might lead peers to think the same.

For example, Michael said

If you kind of get your inhaler out people sort of stare at you, oh what is he doing he must be dying or something like that... you know it is kind of like you are in a group, in a stereotype group sort of thing... yeah I remember when I was at primary school people thought I was dumb because I had asthma.

A minority of participants were concerned about the impact of media representations on their peer’s perceptions. Most participants noted that even though there were negative representations of asthmatics in the media they did not think it necessarily portrayed social reality. At least half the participants thought their peers knew at least a few people that had asthma and did not align with the media portrayal of asthmatics; therefore, they believed that most of their peers recognised the representations were not realistic.

“Some of my rugby mates the real buff guys and they have asthma so even though an inhaler is normally associated with I guess a nerd or a geek it doesn’t really affect social and real reality.” (Bryson)

#### **4.3.2 Desiring normality and peer acceptance**

Feeling ‘normal’ and gaining peer acceptance for most participants seemed important to their social and emotional development (e.g., self-confidence, empathy towards others, and managing feelings). It was apparent throughout the interviews that individual behaviour around their medication compliance could be guided and influenced by the social environment, for instance the groups to which the participants associated with, and their high schools and the communities in which they lived. Consequently, their peers and society’s expectations around asthma influenced the majority of the participants’ asthma medication management.

For example, Gareth did not want people to see him taking his medication because

“People sort of try to look after you a bit more than everyone else, treat you a bit differently which can be quite annoying.”

Patterns showed that the majority of participants would hide their medication and/or symptoms in a desire to be perceived as ‘normal’ by their peers and teachers. Downplaying of symptoms was most noted on social occasions (e.g., school, friend’s house, or going to the mall).

William said, “I don’t tend to bring it (inhaler) when I’m going to friends places.”

Greg mentioned that, “Usually just social things I don’t bring it (inhaler).”

A few participants explained that if they used their medication in social contexts that they would try to do it discretely.

“I try to do it discretely; I lean down to get my bag and do it then. I don’t want to distract other people. Or I go outside.” (Greg)

Trying to take asthma medication discretely could result in taking it at the wrong time, as well as poor technique and administration of their medication, which could negatively affect their incidence and control of asthma symptoms. Their need for discretion was driven by wanting to fit in and not being treated differently because they needed medication for a chronic medical condition.

For example, Justin said

“You don’t want to tell a teacher because you don’t want to be the odd one out who has to do different things because of asthma.”

It appeared the participants did not mind telling their friends they had asthma if they had to, because they felt like they could trust their friends. Seven participants said they tell their friends that they have asthma; six mentioned they would sometimes if necessary and two said they would not. The participants seemed less comfortable about using their medication in front of unfamiliar people at the risk of being teased or perceived as ‘different’. None of the participants stated that there was explicit peer pressure to downplay their asthmatic symptoms; it was more about implicit peer pressure to fit in and feel a sense of belonging.

### **4.3.3 Social support**

Social support can be and is not limited to informational, emotional, and tangible support provided from other people (e.g., parents, peers, or teachers) to provide an individual with a belief that one is loved and cared for, esteemed and valued, and part of a supportive social network with mutual respect and obligations (Cobb, 1976; Kim, Sherman, & Taylor, 2008). More than half the participants described how social support or rather the individual perception of having social support could affect their asthma medication management. Within this study most participants were essentially influenced by two of the most commonly identified types of social support within health literature, informational and emotional support (Costello, 2012).

#### **Informational support**

Over half the participants received information, guidance, or advice to help them manage their asthma. Thirteen out of fifteen participants stated that they learnt the most about asthma from their mothers and/or doctors. Eight participants specifically identified the importance of their mother for informational support; for example

Robert said, “I learnt most from my mum.”

Greg stated, “Probably from mum, she sort of researches stuff to do with me.”

The participants also relied on their mothers for guidance and advice

“My mother always told me to stop when I had it, so I just stop.” (Andrew)

The bulk of participants said the reason for turning to their mother for informational support was because their mother either had a health related job (e.g., nurse and doctor) or knew about asthma from previous experience (e.g., other siblings). The two participants that did not mention their mother and/or doctor as a source of informational support, showed patterns of being uninformed and uneducated about their asthma. They did not know the difference between their asthma inhalers, which contributed to patterns of underutilisation of long-term preventive medication and over use of reliever medication. These two participants said they relied on school education and visual media to inform and educate them about their asthma. However, the majority of the participants said they did not learn anything about asthma at high school.

Tyrone said, “No we don’t talk about that (asthma) in health or subjects to do with medical things. Just about drinking we talk about.”

The participants indicated that information about asthma provided by high schools was lacking. Three participants described they were motivated to personally search for health related information.

Nate said, “Because my teacher didn’t actually know much about asthma when I was at high school, so I looked up some videos.”

Justin believed the teachers at his school did not understand what asthma was and as a result, he felt they were not very sympathetic.

“They don’t necessarily think about how the person who has asthma would feel.”

None of the participants mentioned schooling as the main source of informational support. Four participants specifically revealed that high school did not provide an environment for informational support and two stated they received some information in schooling before high school. Bryson was the only one who said there was any asthma education at high school. Bryson attended a health day, which provided information on asthma, which he found to be very beneficial as he learnt what asthma actually does to his body.

“Before the health day I never really knew why or how it affected me and learnt that from the health day and I’m pretty happy now.” (Bryson)

When the participants mentioned they learnt something about asthma through visual media, movies and television shows were not mentioned, but eight participants stated the news and television advertisements was used as a source of information.

Michael, Blake, Bryson, and Tyrone recollected examples of direct-to-consumer-advertising [DTCA] as examples of informational support.

“There are those TV commercials, where that man recommends that blue inhaler and the different type of inhaler that is red or something.” (Michael)

Through the interviews a pattern emerged that represented most participants recollected messages about asthma from television advertisements. However, the participants generally did not gain any valuable information from the DTCA advertisements; they said they were just encouraged to buy certain inhalers (e.g., Ventolin and Symbicort). Three participants also recollected health promoting television advertisements about asthma, for example, Mason got the message from a television advertisement that a safe and warm environment is important because asthma is serious for children. Due to nearly half of the participants recollecting asthma

information from television advertisements, health promoting television advertisements could be a viable communication medium to provide information on asthma for adolescent males.

Anthony, Greg, and Darius said they have seen and learnt information on asthma from the news on television. They said it was very factual and they felt the news portrayed asthma as a serious condition. However, Justin was concerned that it was just about facts; they did not care about the person that had it.

“It seems like it’s just about facts or making jokes about it, it’s not like they really care about the person that has it, just the facts around it.” (Justin)

It was evident that most participants relied on their mother and doctors as the main source of informational support. However approximately a third of those participants struggled to interpret what asthma was. Overall, four participants were identified as having a limited understanding of asthma, while nine were satisfactory and two were considered excellent. The participants described that information about asthma was not reinforced at high school and they felt it was important that asthma should be explained in school, so they could be reassured and their peers and teachers could understand what it is like to have asthma. In addition, nearly half the participants explained that visual media (e.g., news and non-advertising advertisements) could provide opportunities to help inform asthmatics.

### **Emotional support**

Emotional support gave more than half the participants the feeling that they were cared for via an empathic, caring, loving, and trusting environment. This environment appeared to encourage feelings of self-worth and belonging, which seemed to increase their coping capacity. Six participants specifically mentioned that the emotional support of their mother was important to their medication compliance.

Blake said, “I don’t take my inhaler to sports games, but if I get asthma my mum will probably run home and get it.”

Wade mentioned that, “my mum, is like the one that usually reminds me to take my preventer.”

Generally, the participants relied on their mothers to supply their medication and remind them to take it. In addition, if they were having problems with their asthma they normally turned to their mothers for support.

Knowing that asthma is fairly common and integrated within their social networks through having friends and family with asthma was important in providing emotional support for most participants, as it reinforced a sense of normality and belonging for most participants.

“When I got here it seemed to be very common thing here, oh you have asthma so does my brother or something like that.” (Bryson)

“I used to think if someone had asthma may be people would think less of you, but it’s kind of a social thing now it’s so common.” (Justin)

This commonality of asthma was most often discovered by the participants through the context of physical activity. A few participants mentioned when they were exercising and noticed one of their peers showing symptoms of asthma, they felt more comfortable to express that they had asthma too and common ground was established. In addition, four participants said the reason they normally mention they have asthma in a sporting context and not a social setting, is because the asthma symptoms are more likely to occur in an environment where physical exertion is required.

“My first ever rugby game I had bronchitis and all my rugby mates were surprised and they were like oh you have asthma, and found that common ground and they were like I have asthma too.” (Bryson)

“My mate does rugby and he has it, we both can relate it’s really annoying.” (Justin)

Social support was important to help participants to adhere to their prescribed medication regimes. Approximately half of the participants mentioned that once they gained control of their medication and symptoms they tended to become careless and slowly forgot to take their medication because they could not be bothered, or were confident they did not need their medication anymore. Lack of symptoms suggested to four participants that they no longer had a chronic medical condition that required monitoring and preventative treatment.

Michael, Justin, and Anthony explained reasons for limited self-compliance with their medication:

“Umm I suppose you get a bit careless when you get a bit older you just don’t do it.” (Michael)

“I just generally don’t use it because I can’t be bothered.” (Justin)

“Umm yeah over the last year I’ve sort of slacked on the medication because I forget to take the inhaler and I have been too busy and tired.” (Anthony)

It was evident that most participants desired normality and they endeavoured to achieve this by being in control of their asthma management. The majority of the participants struggled with their desired independence and occasionally relied on the informational and emotional support of their mothers.

Through the interviews, it was evident that social support was important; I observed that when there was low informational and/or emotional support the participants generally presented examples of underutilisation of long-term preventive medication.

For example, Blake asked, “what does the different colour things do, like the inhalers”.

Throughout the interview Blake did not show any indication of being provided any informational support, consequently he portrayed a limited understanding of his asthma medication management.

Seven participants said they only used short-term preventive medication (Ventolin). Three of those participants specifically stated they did not know any other medications and/or the difference between the inhalers. Most participants described their asthma was not under control and as a result overcompensated with the use of their Ventolin medication. For example, William said he used his blue inhaler (Ventolin) about six times a day, this demonstrates his asthma might not be under control and he should review his medication with a health professional.

## **4.4 Masculinities**

The masculinities theme describes the qualities, characteristics, and roles generally considered typical of, or appropriate to, being a male in New Zealand. This theme described how the participants constructed and interpreted these gendered roles of masculinity and how these masculine influences affected their asthma medication adherence.

### **4.4.1 Participants’ perceptions of masculinity**

This subtheme is about the participants’ perceptions of a stereotypical male in New Zealand society and how the attributes associated with this stereotype may affect their asthma management. A few younger foreign participants struggled to identify a stereotype of a typical New Zealand male and they described an ideal male should be ‘sporty’, ‘healthy’, ‘nice’, and have a good job. The older participants were more specific and detailed with what represented the stereotypical New Zealand male. A stereotypical New Zealand male would play or watch rugby and be tall, athletic, healthy, strong, masculine, and tough. Eight participants believed there was a cultural stereotype of how males should behave in society, which aligned with



characteristics of hegemonic masculinity. Five participants did not understand the question and/or did not feel comfortable providing an answer. The remaining two challenged the ideals of hegemonic masculinity and believed that everyone is different and this uniqueness can be represented in a diversity of experiences.

William and Nate believed that males embodied multiple masculinities in society.

“Everyone’s different in their own way... there is no common job, no average person if you should be fit or overweight, and you should just be whoever you are and how you seem to be.”  
(William)

Eight participants said that having asthma makes it harder to obtain the qualities of becoming a stereotypical male in New Zealand.

These participants said that asthma can be a barrier to strenuous exercise which makes it difficult to improve their fitness and obtain a masculine physique which six participants stated was ‘annoying’ and/or ‘frustrating’.

It could prevent or hold you up from doing some of these things. Like if, you try to do lots of sport or exercise to muscle up and you get an asthma attack it might not be the most manly of things. (Mason)

Most participants believed because asthma restricted their ability to participate in physical activity they were unlikely to obtain some of the qualities and jobs expected of a typical male in New Zealand. Darius, Anthony, Mason, and Justin believed it was more difficult to become a farmer, builder, or sports professional because asthmatic males are less athletic and strong, compared to non-asthmatic males.

Greg, Michael, and Mason believed that having asthma did not fit the mould of the stereotypical New Zealand male.

When Michael answered the question about what qualities he thought a typical New Zealand male would have; he responded “They won’t have asthma.”

Greg supported Michael’s beliefs and said, “You can’t really be sort of quite hard and have asthma.” Greg felt males without asthma were tougher because he thought other illnesses did not really affect them as much.

The majority of the participants constructed the stereotypical male around qualities of hegemonic masculinity and were sometimes frustrated because asthma could threaten these desired qualities.

#### 4.4.2 Masculinity in sport

The majority of the participants said sport was very important to them and all the participants mentioned that asthma affects their ability to participate fully in sport.

“It’s just... argh... miss out on sport.” (Darius)

“I myself really like sport and sometimes I can’t participate because I have got asthma.”  
(Andrew)

Sport was important because it provided opportunities to live a ‘normal’, independent, and healthy life. Male role models (e.g., teachers, fathers, and brothers) were identified by three of the participants as important in supporting them to set goals, meet challenges, be active, and instilling a respect for healthy lifestyles. However, those participants mentioned that they would ignore their asthma symptoms and continue to attain their goals in an effort to avoid being treated differently because of their asthma.

“My brother pushed me to run five kilometres and I did and I couldn’t breathe at all.” (Nate)

Sport provided opportunities for the participants to integrate with disparate individuals, affiliate with a team, and to challenge themselves against others. The participants observed that sporting experiences could either positively and/or negatively influence their sense of identity. For example, some participants mentioned their experiences of being part of a sports team, some observed it gave them a sense of belonging and increased their self-esteem but others commented that it allowed opportunities to isolate the less athletic team members. As a result, most participants said at some point they downplayed their asthmatic symptoms to continue to compete in sport because it was fun, they did not want to let their team down, and did not want to lose.

“When I was doing swimming, I was coming first and I wasn’t going to stop.” (Michael)

“I would downgrade it (asthma) and keep running and stuff even though I was puffing and puffing and nearly dying at the end of it.” (Justin)

The participants demonstrated they just wanted to be like everyone else and they valued the enjoyment and competition of sport sometimes over the potential threat of exacerbating their asthmatic symptoms. The participants did not want to lose because they did not want to be associated with qualities that are normally stigmatised with asthmatics (‘unfit’, ‘nerd’, ‘scrawny’, and ‘soft’).

To cope, a few participants mentioned they ‘toughen up’ in sport to avoid being associated as ‘different’ or ‘soft’.

For example, Andrew said, “I wasn’t going to let him be better than me”; referring to a fellow athletics runner, he competed against.

Wade explained a risk taking behaviour of violence in sport to help him cope with his asthma.

“I don’t really care if they say anything when you’re playing rugby you just smash them.”

Sport was important to the participants’ social development, but the unpredictable nature of asthma could threaten their ability to participate fully in sport at times, which could affect their social identity. Therefore, at times the participants downplayed their asthma symptoms to help maintain their desired identity of being independent, competitive, and strong.

#### **4.4.3 The influence of masculinities on asthma medication management**

The participants generally believed that talking about and managing asthma was the same for both males and females. However, nearly half of the participants explained why male adolescents might find it more difficult to share their asthmatic condition.

“I guess probably harder for males, I guess males don’t really talk about their health as often as you hear on the media and everything they don’t talk about it enough.” (Michael)

“Well females tend to be more open about things. Because males are like... argh... feelings!” (Mason)

One of the reasons participants did not initially talk about their asthma to others is because they believed asthma was not a big deal. They did not want to complain or be treated differently therefore they would not go out of their way to talk about it, but if symptoms were becoming serious they were confident they would tell someone.

I guess the thing about men... I have a really bad habit if I feel some sort of pain or discomfort I won’t necessarily complain about it, like I nearly broke my toe or something I don’t complain about it, still hurting and stuff it’s like a pride thing guys generally want to be the strong ones not to complain just to look good. (Justin)

During the interviews it became apparent that at least half the participants were initially reluctant to share that they had asthma or were experiencing minor symptoms, and would only speak out once it was getting serious.

I probably wouldn't bother going to the doctor until it was getting really bad. I wouldn't just turn up if I had a little thing in my head, if it starts to get really bad I would go, but not if it was pathetic or something like that. (Michael)

These reactive patterns were evident in their medication maintenance as well; generally, the participants would only use their medication if asthmatic symptoms occurred. They disregarded the long-term health benefits of regular use of long-term preventive asthma medication (e.g., Flixotide).

Darius said, "I just take the inhaler (Ventolin), that's about it. If I do get it bad and I can't find my inhaler I usually go to the doctor and get the orange one (Flixotide)."

The participants generally did not see the value and/or understand the long-term health benefits of regularly taking medication other than their Ventolin. Mostly they thought asthma was not a big deal because they were 'growing out of it' therefore they did not need regular medication for their asthma. Consequently, most participants relied heavily on the short-term relief of Ventolin when symptoms occurred.

Through the interviews, it was apparent that participants' asthma management decisions could be affected by observations and experiences of how males are stereotypically expected to behave in society. There was evidence to suggest that the ingrained influences of hegemonic masculinity can subconsciously influence how the participants managed their asthma. Representations of males being 'tough' and 'self-reliant' influenced most participants to downplay their asthma symptoms and resulted in the participants showing patterns of low levels of health-promoting and help-seeking behaviour.

## **4.5 Summary of findings**

This chapter has provided data that specifically answers the research question by illustrating how adolescent males' perceptions of masculinity influence their asthma management. In this study, most participants described media representations of people with asthma as infrequent and stigmatised. Half the participants expressed that asthma had limited representation as a serious chronic health condition and consequently asthma was generally used as comic relief typified by 'nerdy' characters in movies and television shows. Consequently, many participants felt the media minimised and mocked their experiences as adolescent males with asthma. The media stigmatisation of people with asthma increased the susceptibility to the internalisation of a negative asthmatic self-identity for a minority of participants. Conversely, participants' reported that media portrayals had no significant external influence (e.g., peer pressure) on their asthma

medication compliance and as a result not one participant identified external peer pressure to downplay their asthma symptoms. However, most participants reported they were influenced internally and their desire to feel like a 'normal' teenager and to gain peer acceptance affected their asthma medication adherence. Most participants' perceptions of 'normal' aligned towards beliefs of hegemonic masculine qualities of being strong and resilient which resulted in most participants downplaying their asthma symptoms and/or not taking their medication. In addition, most participants did not want to miss the possible social benefits of physical activity and/or provide an opportunity to be treated differently. Social support from asthmatic peers and supervision from mothers were identified as key factors influencing adherence to prescribed medication regimes. For instance, most participants explained that they were trying to be independent with their medication treatment, but many were actually still dependent and discretely sought informational and emotional support from their mothers to help maintain prescribed medication regimes. Most participants who received limited informational support expected asthma education to be reinforced in high school; however, participant descriptions indicated that minimal informational support was provided within their high schools. Subsequently participants who felt unsupported generally presented examples of underutilisation of long-term preventive medication.

In this study qualities of hegemonic masculinity were characterised in the participants' representations of the stereotypical New Zealand male, however two participants' challenged the ideals of hegemonic masculinity and identified males as inhomogeneous. All participants in this study reported that asthma restricted participation in sport and for the majority sport was acknowledged as important to their self-identification as a New Zealand male adolescent. Physical limitations were frustrating to participants; consequently, nearly half of the participants positioned themselves with a subordinate and/or marginalised masculinity. These participants sought to challenge their marginalised masculinity with their peers through the context of sport, which sometimes resulted in participants' 'toughening up' and ignoring and/or downplaying their EIA symptoms. Consequently, over half the participants reflected the historical desire to fulfil conventional 'unhealthy' masculine positions of being tough and strong as some participants' described reactive, non-help seeking behaviours, and minimisation of their asthma symptoms. However, hegemonic masculine traits were also protective of some participants' asthma, as qualities of self-confidence, resilience, independence, competitiveness, and athleticism encouraged most participants to live a physically healthy lifestyle that can help control and minimise the incidence of asthma symptoms. In summary, most participants were tolerant of managing their asthma symptoms, however at times most were frustrated because asthma limited their physical and social interactions with their peers, which could

unpredictability, affect their masculine identity of seeking to be independent, strong, muscular, and competitive. Consequently, to maintain control and normality in front of peers most participants at times downplayed their asthma symptoms and/or did not adhere to their prescribed treatment regimes.

This chapter has presented the findings from the analysis and the two main themes (social influences and masculinities) and related sub-themes were explored. The findings under each of these two main themes and related sub-themes were directed and supported through summaries and quotations from the participants' experiences, so the voices of the participants could be directly heard. The next chapter discusses in greater depth the meaning within these interrelated themes and indicates how these findings are consistent with or differ from previous studies and illustrates the new insights gained from this study.

## **Chapter Five:**

### **Discussion**

This chapter summarises past studies, and eight key findings (themes and sub-themes) from this study. I also explored the key findings, strengths, and limitations of this study.

#### **5.1 Introduction**

Previous research suggests there is a general acceptance of potential difficulties with asthma management during adolescence; however, there is limited specific information exploring causative factors (Gibson, Henry, Vimpani, & Halliday, 1995). Furthermore, research and evidence pertaining to specific health experiences of adolescent males is especially limited (Courtenay, 1998). Given the insufficiency of information, I selected a QD study design to investigate the experiences of male adolescents with asthma, focusing on their understanding and management of their asthma symptoms. The purpose of this study was to explore how male adolescents understand and manage their asthma symptoms.

The objective of this chapter is to explore the rich descriptions revealed by the participants in this study in the context of extant literature discussed throughout chapters one and two. I will re-examine the literature that investigated the social influences of adolescent asthma medication adherence; covering the influence of stereotyping and stigma of asthmatics, peer pressure and desiring normality. In addition, I will examine why the majority of the participants in this study identified that internal peer pressure was more influential than external peer pressure on their asthma medication adherence. I also discuss social support, particularly informational and emotional support within the school environment and the role of the mother, and these influences are considered as emergent protective factors for asthma management for most participants in this study.

The masculinities and asthma section in chapter two of this study is reviewed in the context of participant interpretation of masculinities and the influence of masculinities on participants' asthma symptom management. In addition, I discuss the New Zealand masculine culture and how it has evolved with a strong emphasis on sporting prowess and achievement, which reflects ideals of hegemonic masculinity that may influence some male adolescents' asthma medication management decisions. Lastly, the masculinities section of this study considers in what ways historical hegemonic masculine traits can influence adolescent males' decisions around their asthma medication management. I also explore how multiple masculinities are evolving as

gender roles change, which could potentially encourage males to engage in proactive and protective roles of their asthma medication adherence.

## **5.2 Social Influences**

For the purpose of this study, social influences are the individual actions, reactions, and thoughts influenced by other people (e.g., peers, family, and teachers) and society (e.g., media and school) which can affect individual attitudes toward health and life-style choices. Within this theme I discuss stereotyping and stigma of male adolescents with asthma, their desire for normality, peer acceptance, and social support. Each of these can influence individual male adolescents' emotions, opinions, or behaviours relating to their understanding of asthma and medication compliance.

### **5.2.1 Stereotyping and stigma of asthmatics**

This sub-theme discusses how stigma and stereotyping of asthmatics in this study influenced some participants' asthma medication compliance. Most participants in this study elucidated that stereotyping and stigmatisation of people with asthma was reinforced through media portrayals of asthmatics. In the context of this sub-theme, I considered how the media contributes to the stereotyping and stigma of asthmatics and how stigmatisation can internally and externally influence the decisions of male adolescents' asthma management.

In this study, most participants believed the media did not depict asthma as frequently as other chronic illnesses. Nearly half of the participants mentioned they seldom saw asthma portrayed on the television, for example Wade described that asthma has a low television profile. Ayala et al. (2006) also described how some American middle school aged participants were concerned that limited publicity of asthma meant that their peers did not view asthma as a severe chronic illness. Infrequent portrayals of asthmatics in the media are consistent within previous research (Ayala et al., 2006, & Clark, 2012). Participants in this present study observed that the inadequate media representation of asthma compounded their impression that the media did not take asthma seriously and consequently a few participants minimised their asthma symptoms (e.g., conceptualising that asthma was not a big deal). According to Clark (2012), the media can affect how children view their illness and commit to its treatment, which is reflected in this current study. The perceived media reinforcement that asthma is not a serious health condition predisposed most participants to be less concerned about maintaining their asthma treatment regime, especially long-term preventive medication.



Some media portrayals may misrepresent frequency of inhaler use and best practice medication regimes (Clark, 2012). In Clark's (2012) analysis of 66 movies containing asthma scenes, it was represented that scenes using asthma medication were depicted in un-prescribed ways. For example, in the movie *The Goonies* the character Mikey who has asthma only uses his asthma inhaler after strenuous events. Reactive interim asthma medication maintenance is represented by most fictional characters with asthma, generally typified by constantly reaching for their short-term relief inhalers when asthma symptoms persist. Misrepresentations of asthma inhaler usage via the media may have contributed to seven participants in this study describing patterns of over using their short-term reliever medication when asthma symptoms persisted. The use of regular long-term preventive medication is limited within the media portrayals of people with asthma, which may have reinforced short-term quick fix behaviours and underutilisation of long-term preventive asthma medication among the participants in this study.

However, not all aspects of the media are potentially detrimental to adolescents with asthma. For instance, three participants in this study specifically identified and recollected health protecting asthma practices and/or messages from health promoting television advertisements (e.g., *Smokefree*). For example, Anthony recalled a television advertisement portraying 'smoking not our future' and his interpretation was that if you have asthma you could not smoke. The television advertisement reinforcing the message that a safe and warm environment is important because asthma is serious for children was also significant to Mason. These examples suggest that advocating asthma information through television advertisements could be a viable communication medium to provide information on asthma for adolescent males. Additionally, the media could provide an opportunity to deliver stigma-countering information to the community, which may potentially increase awareness and decrease isolation of adolescents with asthma (Clark, 2012; Giorgianni, Grana, & Keith, 2004).

Bryson, Justin, and William explained in their interviews that characters portrayed as asthmatics seem to have un-masculine qualities. This is consistent with Ayala et al. (2006) and Clark (2012) whose research indicated that various media depicted people with asthma as nerdy, vulnerable, wimpy, and non-heroic. Misinformed portrayals of people with asthma were specifically evident in Clark's (2012) research as she articulated that most nerdy characters produced by Hollywood movies have come equipped with an asthma inhaler, (e.g., *Jimmy Neutron*, *Sidekicks*, *The Goonies*, *Toy Story 2*, *Hitch*, and *Without a Paddle*). For instance, in the movie *Without a Paddle* the male asthmatic character is portrayed as pathetic, weak, and afraid of everything. Visual media can reinforce collective parameters of the normal, the acceptable, and the beautiful (Scheper-Hughes, 1990). They do not simply reflect reality, they represent it through codes and

languages, which are socially constructed and privilege certain points of view, often associated with hegemonic groups (Bannister, 2005). As a result, the asthmatic identity can be characterised as a form of weakness, used to emphasise the strength and power of the non-asthmatic hero in action films and inject humour into comedies. In this research, Bryson observed that he had never seen a ‘normal’ character like a GI Joe with asthma; an asthmatic was stereotypically represented with qualities of vulnerability and dependency, like Milhouse in the cartoon series *The Simpsons*. These qualities are usually associated with geek-like presentation and can be typified as un-masculine. For example, Buchbinder (2010) stated that geekiness seems to be constructed as the complete opposite of ‘real’ masculinity. The role of the geek character is typically associated as an asthmatic, physically unattractive, lacking in true manly courage and bravado, and frequently feminised. Therefore, the geek may be ostracised, ridiculed, vilified, and otherwise exiled to the margins of the masculine and of the social world (Buchbinder, 2010).

Consequently, most participants in this study desired ‘normal’ characters to represent asthmatics; their definition of ‘normal’ aligned within attributes of hegemonic masculinity or as Buchbinder (2010) describes it ‘real’ masculinity, displaying better than average looks, a strong and imposing physique, and a stoic attitude. The ‘normal’ character with ‘real’ masculine qualities of the superhero attracts admiration and respect of men; hence, Buchbinder (2010) suggests some individual males strive to achieve these qualities, and risk negative implications for their health. The pressure to accomplish these desired qualities can lead to mental health issues like obsession with body image and eating disorders, and also influence poor choice-making (e.g., use of anabolic steroids; Buchbinder, 2010). In this current study, over half of the participants managed the potential stigma attached to asthma by concealing it, in order to achieve the desired masculine qualities and to maintain conventional self-presentation as a stereotypical ‘normal’ adolescent male. A few of these participant descriptions coincide with Williams (2000a) research which indicated that the majority of the British young men interviewed in her study managed asthma in ways designed to minimise the potential stigma attached to illness. One of the main reasons participants in this current study concealed their asthma symptoms or medication was the fear of being treated differently and possibly isolated from the rest of their male adolescent peers.

Most participants in this study identified stigmatisation of asthmatics principally through the reinforced stereotypes of asthmatics in the media. Stigma and stereotyping of asthmatics can be detrimental to treatment adherence (Andrews, Jones, & Mullan, 2013; Jessop & Rutter, 2003; Stuart, 2006). Yet there is limited research specifically examining the impact of stigma on people living with asthma (Andrews, Jones, & Mullan, 2013). According to Greaves, Oliffe, Ponc,

Kelly, and Bottorff (2010), health-related stigma can be pervasive for individuals or groups and can manifest both externally and internally. In their study Canadian fathers were internally (e.g., guilt, stress, and shame) and externally (e.g., partner, family, and friends) pressured to give up smoking tobacco as it may threaten their sociocultural role as a father, whom is stereotypically expected to be the protector and the provider of his family. External stigma can affect the way people are seen and treated in social settings. Internal stigma may refer to individual recognition of the stigma and/or conforming to the assumptions that underpin the stigma by internally applying the stigmatised beliefs to themselves, which may result in negative outcomes (e.g., blame, low self-esteem, and confidence) which can be detrimental to one's health (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010).

In this present study, the perceived stigmatisation of asthma by the media was persuasive and was internalised by a small minority of participants, resulting in a negative asthmatic self-identity. This was consistent with Adams, Pill, and Jones (1997) view that some of their British participants represented a negative self-image of being an asthmatic and referred to people with asthma as a 'weakling' and 'wimp'. Approximately a quarter of participants in this current study described they were not confident to accomplish perceived non-asthmatic stereotypical masculine roles. These participants believed asthma affected their masculinity (e.g., strength and athleticism) therefore reducing the opportunity to participate in macho roles such as building, farming, or becoming a professional athlete. These reactions can be detrimental to long-term health outcomes of male adolescents with asthma. These findings are supported by Couriel's (2003) study where the responses of 789 male and female British asthmatics aged between 11 to 16 years old stated that one of their main concerns was not being able to get the kind of job that they wanted because of their asthma. The potential negative effect on the participants' levels of self-efficacy and ability to effectively self-manage shown in this study and supported by Couriel (2003) is cause for concern.

However, most participants in this study considered that the external stigma and stereotyping of asthmatics reinforced by the media had minimal influence on their peers' beliefs. Historically, asthma symptoms were viewed as a result of nervousness and hysteria, up until the 1960s, asthmatics were diagnosed with psychological disorders and were provided with treatment for depression (Andrews, Jones, & Mullan, 2013; Opolski & Wilson, 2005). These undesirable attributes of nervousness and fearfulness have been reinforced through most media representations of asthmatics. These illustrations may influence society's perceptions of asthmatics, which can affect some asthmatics to experience embarrassment over medication use in public. The perceived risk of humiliation of being associated with asthma may result in

nondisclosure of their asthma medication and/or symptoms in public (Andrews, Jones, & Mullan, 2013). The minority of study participants were worried and/or braced for social backlash because of the representation of asthmatics in the media. These findings are consistent with Clark's (2012) research of 12 American asthmatic children aged 9 to 12 years where only a few of her participants worried about how the media depiction of asthmatics might threaten their social identity. However, external stigma may have influenced Adam, Pill, and Jones' (1997) study of British asthmatics, which demonstrated that most of their participants actively avoided associations of what they considered a stigmatised group and rejected an asthmatic identity as part of their self-image.

Conversely, in this current study most participants identified low external stigma and showed encouraging signs of comfortably accepting an asthmatic self-identity. Their view was partly influenced by the exaggerated, highly stereotypical media portrayals, the absence of medical validation, and the increasing commonality of diagnosis and normalisation of asthmatic symptoms within New Zealand. Accordingly, the majority of participants in this study were not worried about the social consequences of asthma representation in the media and were confident their peers could distinguish between factual and fictional information represented by the media. Even though external stigma (e.g., peer pressure) had a limited impact on asthma medication management for most participants in this study it is important to consider that most male adolescents lacked personal responsibility for their asthma management in public settings because of the risk of being treated differently. This may have influenced the participants to describe external influences in minimising terms. Minimal external stigma may have been apparent in this study because the incidence of asthma has been increasingly recognised in New Zealand, for example the Asthma Foundation, New Zealand (2012) estimated that one in four children have asthma, affecting over 600,000 New Zealanders. Accordingly a more visible asthmatic profile has emerged which potentially reduces susceptibility to isolation and external stigma of people with asthma.

In conclusion, it was evident that the media generally represented asthma infrequently. Most participants in this study articulated that the media did not take asthma seriously and as a result, most participants underestimated the consequences of not adhering to their long-term asthma medication. When the media did portray people with asthma, they were mostly typified as nerdy, different, and inferior. The persuasive stigma reinforced by the media affected half the participants to internalise a negative asthmatic self-identity and worry about being treated differently. This may suggest asthma-related stigma is potentially an important barrier for male adolescents' self-management due to its effect on self-efficacy and their desire to be 'normal'.

A need exists for consistent asthma education and awareness promotion via the electronic mediums utilised by adolescent males to reinforce the severity of asthma and the social and physical benefits of having asthma under control.

### **5.2.2 Desiring normality and peer acceptance**

The literature review in this study identified that adolescent asthma medication adherence can be internally influenced by most adolescents desiring normality and peer acceptance, however it was unclear if the influence of external peer pressure affected adolescent asthma medication adherence. Findings in this study identified that implicit peer pressure (e.g., gaining peer acceptance) was more influential to the participants' asthma medication adherence than explicit peer pressure. Therefore, in this sub-theme I will reanalyse previous research which identifies external peer pressure as an influence in light of the findings from this study and consider the differences between the internal and external influences of peer pressure. I will then discuss how desiring normality and peer acceptance in this study may influence asthma medication adherence.

None of the participants in this study specifically mentioned they had faced external peer pressure or teasing to downplay their asthma symptoms. In contrast, the findings from the literature review identified external peer pressure as an influence affecting adolescent asthma medication adherence (Bruzzeze, Fisher, Lemp, & Warner, 2009; Couriel; 2003; Fitzgerald, 2001; Kyngäs, 1999; Kyngäs, 2004; Letourneau et al., 2012; Price, 1996). However, the majority of the literature used to ascertain the influence of peer pressure on asthma management focused on other chronic illnesses (e.g., diabetes). Therefore, the previous findings did not provide coherent evidence to determine if external peer pressure is an influence on adolescent asthma medication adherence. Findings in this current study indicated low explicit peer pressure on asthma management, which is at variance with the previous studies that identified peer pressure as an influence on asthma management. For instance, Kyngäs's (2004) qualitative study identified some of their participants' were influenced by external peer pressure and/or teasing because of their chronic disease. Kyngäs (2004) interviewed 40 Finnish adolescents aged 13 to 17 years old with a chronic disease, 12 participants' were identified as asthmatics. One participant in their study described they got teased because they had to take their medication, while others mentioned some peers tried to persuade them to follow an irregular and unhealthy lifestyle. Kyngäs's (2004) study is supported by Bruzzeze, Fisher, Lemp, and Warner's (2009) quantitative study of two American high schools which collated 765 questionnaires from adolescents aged 12 to 18 years. Their study identified that most of their participants with

asthma experienced increased social anxiety compared to the non-asthmatic participants and explicit peer pressure and/or teasing because of their asthma was identified as a possible cause for the increased social anxiety.

It is important to observe that the influence of peer pressure on adolescent asthma medication management may differ and be attributable to varying methodologies and populations. For instance, this current study had participants which experienced low external peer pressure on their asthma medication management and these participants were from populations of a high incidence of asthma, for example, New Zealand 15.1% (Braman, 2006; Masoli, Fabian, Holt, & Beasley, 2004). Whereas Bruzzese, Fisher, Lemp, and Warner (2009) and Kyngäs's (2004) study which identified the influence of external peer pressure on adolescent asthma medication management had a studied population with a lower incidence of people with asthma, for example, United States 10.9% and Finland 8% (Braman, 2006; Masoli, Fabian, Holt, & Beasley, 2004). The global asthma report 2011 further illustrates the difference in adolescent asthma incidence rates between New Zealand, Finland, and the United States. The report indicated that 32.4% of New Zealand adolescents aged 13 to 14 had experienced asthma symptoms compared to the United States and Finland which had experienced 17.4% and 7.7% respectively (International Union Against Tuberculosis and Lung Disease, 2011). The increasing rate of asthma diagnosis in New Zealand was described by most participants in this current study, for example Justin said, "I used to think if someone had asthma may be people would think less of you, but it's kind of a social thing now it's so common" and Bryson who moved from Zimbabwe to New Zealand said, "When I got here it seemed to be very common thing here, oh you have asthma so does my brother or something like that". As a result of the increased incidence of asthma in New Zealand, at least half the participants believed social acceptance of asthma was increasing too, which made a few participants more confident to share and manage their condition in public settings.

These findings are mirrored within Gabe, Bury, and Ramsay (2002) research of 55 British male and female participants aged 11-16 whom had asthma. In their study some participants felt that asthma was 'so common' and 'normal' therefore exclusion or a sense of being/feeling different was limited. For instance, one participant said in response to sporting activities at school, "so many have got it that you can't really leave people out or everybody would be left out" (p. 1624). These findings indicate that because of the increased incidence of asthma in New Zealand and the United Kingdom adolescents in these countries with asthma might experience increased social acceptance of their condition, thus creating fewer opportunities to be teased and/or mocked for being different. Subsequently it was evident in this study, and Gabe, Bury, and

Ramsay's (2002) research that recognised commonality of asthma symptoms helped reduce external peer pressure and/or stigmatisation and in turn some male participants were more confident about using their asthma medication in public.

Even though over half the participants in this current study described that it was becoming socially acceptable to have asthma, some of these participants' expressed beliefs were at variance to their behaviour. As a few of the participants reinforced the findings in Iley (2007), Rhee, Wenzel, and Steeves (2007) and Williams' (2000a) studies explaining that they still did occasionally hide their medication and/or symptoms, especially in social situations. These participants were still worried about their peers' acceptance of their asthma and consequently feared utilisation of an asthma medication might be perceived by their peers as 'not normal', abnormality can risk social ramifications of being excluded and/or stigmatised by their peers. Consequently, most participants' decision-making pertaining to timing and use of their asthma medication was often determined by their self-perception of what their peers might think of them. These feelings were also represented in Bruzzese, Fisher, Lemp, and Warner, (2009) and Buston and Wood's (2000) research on adolescent asthma management where they explained that some adolescents often felt fearful and embarrassed about using their medication in front of peers. This current study suggests that even though half of the participants were confident about sharing and using their asthma medication in public, some still did experience similar emotions found in previous studies and sometimes hid their asthma medication or symptoms because they did not want to risk being treated differently by their valued peers. In summary, it is understood that even though most participants believed social acceptance of asthma is increasing some still concealed their asthmatic condition in public because of internal influences of desiring normality and peer acceptance. Otherwise, the findings showed that the external influence of peer pressure and the stigma of using asthma medication in public had a minimal influence on most the participants' asthma management. The recognised commonality of asthma diagnosis has been identified as possible influence for the low external peer pressure and stigmatisation felt for the participants to hide their asthma condition. I have articulated in this study and others have too, that most adolescent males are generally reluctant to admit or show their asthmatic condition if they think their peers have never experienced it and/or do not approve of it. Therefore, it is important that health providers promote the commonality of asthma in adolescent males to help minimise self-doubts about sharing their asthma diagnosis with others.

### 5.2.3 Social support

Within this sub-theme, I have explained that social support is vital in encouraging and protecting adolescent asthma medication adherence. It is also discussed how the influence of social support from other people (e.g., parents, peers, or teachers) affected the participants' asthma management.

Social support in this study was a significant protective factor, which influenced the participants to adhere to their prescribed medication regimes. Participants who received informational and/or emotional support from their mothers, peers, and/or doctors generally presented with increased health literacy and described improved utilisation of long-term preventative medication. This is consistent with Letourneau and colleagues (2012) study of Canadian participants aged between 11 to 16 years, which identified social support as a crucial factor in self-management of the stresses of asthma. Social support can play a key role in improving outcomes for adolescents with chronic health conditions, several researchers have showed that social support is essential in fostering resilience, and is a resource for coping, self-efficacy, and self-management of the stresses of chronic health conditions (Letourneau et al., 2012; Stewart, Reid, & Mangham, 1997; Stewart, 2000; Thoits, 1995). These attributes associated with social support has the potential to encourage a smoother transition to adulthood (Letourneau et al., 2012); as males with higher levels of social support are more likely to modify unhealthy behaviours and to adhere to medical treatment (Courtenay, 2011). Investigating social support of adolescent males was important to consider as the unique support needs of youth with asthma have been neglected (Letourneau et al., 2012). Courtenay (2011) said boys are more likely than girls to have no one to turn to for support when they feel stressed, overwhelmed, or depressed especially when they adhere to traditional masculine norms. In this current study, most participants placed high value on the support of peers who also had asthma. The importance of peer support and shared experience of chronic conditions are also reflected within previous studies (Kyngäs, 2004; Velsor-Friedrich, Vlasses, Moberley, & Coover, 2004).

The health protecting benefits of having friends with asthma for most participants in this study is best described through three facilitating processes of support (social comparison, learning, and exchange) identified by Letourneau et al. (2012). Social comparison is self-evaluation in comparison with others, social learning is an exchange of knowledge through a social context (e.g., role modelling), and social exchange is reciprocity or give and take between potential benefits and risks of social relationships (Letourneau et al., 2012). These processes illustrate how many participants in this present study dealt with the potential stress of asthma through seeking



support from their asthmatic peers to cope with loneliness and isolation. Approximately a quarter of participants in this research explained social comparison by relating with other asthmatic peers' attitudes, abilities, and beliefs. They expressed annoyance around the limitations asthma can place on physical activity and compared their compromised participation in sport with non-asthmatics. Nearly half of the participants experienced social learning and exchange through sharing information and advice preferably in the environment of informal settings (e.g., sharing their asthma inhaler in the rugby clubrooms). Social exchange was experienced by participants in this study, a few found it beneficial to know their peers had asthma and a few described that this knowledge supported a deeper relationship which enabled them to relate, understand, and support each other with the unpredictable complications of asthma.

Knowing that asthma is a common health condition and having friends that had asthma was important in providing a sense of normality and belonging for participants in this study. Not all the participants in this study were initially prepared to share their asthma diagnosis with others; this is consistent with the study by McKinlay (2005) which portrayed that young men are generally reluctant to admit or modify their behaviour if they think their peers have never experienced or do not approve of a similar health issue. For example in this study, Bryson was affected by bronchitis in a rugby game, which brought his asthma into the public arena. His rugby teammates were surprised to learn that he had asthma and subsequently a few of his teammates told him that they had asthma too. Finding peers who had asthma through a sporting context instead of social settings was a common situation for most participants in this study because physical activity was more likely to bring on asthmatic symptoms. Most participants in this study found it beneficial to know that others struggled with physical activity because of their asthma. Consequently, they felt less alone and appreciated peer role models to observe asthma management strategies and achieve sporting goals. The commonality of asthma in New Zealand noted by most participants in this study may have enhanced the social acceptance of asthma within their peer groups and assisted some participants to feel less alone and/or different, resulting in improved social competence, health promoting behaviours, and self-coping capacity.

## **High school environment**

In this sub-theme, I discuss what health education is provided in high schools, teachers' attitudes and understanding of asthma, and how the high school environment can affect adolescent males' asthma management.

Over half the participants in this current study expected reinforcement of asthma education in high schools with information and reassurance, as well as support to peers and teachers to facilitate a better understanding of asthma. However, the majority of the participants experienced minimal asthma education at their high schools and most perceived that the focus of their health class was around sexuality and drug misuse. Throughout my teaching experience and personal communication with other teachers, there was no education focusing on chronic illnesses within junior health classes at high school. The main barrier identified is time, junior health classes are scheduled one lesson per week and educators struggle to cover the key areas of learning (e.g., mental health and sexuality education). Education around chronic illness is not specifically mentioned in the New Zealand Health and Physical Education Curriculum (1999) and the New Zealand Curriculum (2007). However, education covering chronic conditions could still satisfy certain achievement/learning objectives within the curriculums. For example, teachers could incorporate Strand A (Personal Health and Physical Development / Personal Growth and Development) and encourage students to critically evaluate a range of qualitative and quantitative data to devise strategies to support the current and future needs for people with different chronic illnesses (Ministry of Education, 1999; Ministry of Education, 2007).

In addition, independent non-profit organisations (e.g., Asthma Foundation, New Zealand) have created events to promote awareness of asthma in high schools (e.g., Dance4Asthma), yet no participants in this current study described that asthma education was specifically covered by their teachers. As a consequence of the limited informational support provided at high school three participants sought their own information via the internet. Unsupported information access can increase the risk of misinformation about their asthma, as it can be difficult for many people to accurately access and evaluate credible health information online (Sherman, 2004).

The participants' descriptions were supported by the Asthma Foundation, New Zealand, medical adviser Dr Tristram Ingham who said more asthma support was needed in New Zealand schools (Anderson, 2013). The transition of health as an educational subject within New Zealand high schools is growing, junior health is compulsory but senior health is optional and only available in certain high schools. Health education within New Zealand high schools needs to continue to grow and incorporate education on asthma, as inadequate health literacy is a barrier to learning asthma self-management skills and is one contributing factor affecting non-compliance with

asthma treatment in children and adults (Couriel, 2003; Harrington, Haven, Bailey, & Gerald, 2013; Paasche-Orlow et al., 2005). Given the increased prevalence of asthma worldwide, the attributable yet preventable health risks, and school absenteeism generated by asthma it is paradoxical that asthma information and awareness was lacking in the high schools attended by participants in this present study.

The potential positive health protecting factors of educating adolescents to effectively understand and manage their asthma was evident within this study when Bryson articulated that an independent health day he attended provided an environment and opportunity to learn what asthma actually did to his body, which he had not understood previously. Bryson described that his uncertainties and fear of the implications asthma may have on his body have reduced with his improved asthma knowledge. Enhanced understanding resulted in Bryson feeling happier and more confident about maintaining his asthma treatment regime. Byron's beliefs are similar to Gibson, Henry, Vimpani, and Halliday's (1995) view that the school environment during adolescence may provide an opportunity to promote positive health care behaviours and specifically responsive self-management asthma strategies. Additionally, Ayala and colleagues (2006) findings strengthened the effectiveness of school-based interventions, and illustrated it could help students with asthma transition to greater autonomy of care, while easing transition in other domains of life.

A minority of participants in this study mentioned that their teachers had pushed them to be physically active and lacked sympathy for their condition; they considered this was due to a lack of understanding of asthma and its impact on health and wellbeing. For example, Justin believed most teachers were not very sympathetic towards students with chronic illnesses which were not visually noticeable and teachers expected students with asthma to participate physically to the same level as non-asthmatic students. Justin elaborated, "even a teacher who's had years of experience they don't necessarily think about how the person who has asthma would feel". Justin's descriptions were supported in this study when a teacher shared a recollection of an experience of a student asking if they could get their asthma inhaler, the teacher did not allow the participant to get their inhaler because the student was not visibly struggling to breathe. This example is strengthened by the Asthma Foundation, New Zealand, medical adviser Dr Tristram Ingham who explained some children with asthma symptoms go quiet and most teachers fail to recognise the symptoms (Anderson, 2013). Lack of understanding and empathy exhibited by some teachers affected the confidence of a few participants in this current study to confide in a teacher when asthmatic symptoms presented. Similar themes were also evident within Gibson, Henry, Vimpani, and Halliday (1995) Australian study which investigated asthma knowledge,

attitudes, and quality of life in adolescents. Part of the study involved distributing asthma knowledge and attitude questionnaires to 1,815 teachers at the participating secondary schools. The results showed that asthma knowledge was generally low in teachers, most struggled to recognise asthma symptoms, and only 5.7% of the teachers knew how to prevent/manage EIA.

High school staff and Physical Education teachers in particular are well situated to play a supporting role in an asthmatic male's life. The school environment and culture can support judgemental behaviour based on misinformation and poor role modelling. In this study, Justin explained that most adolescents he knew at his school with asthma dropped out of Physical Education when it was no longer compulsory, because they feared being teased by their more athletic peers as being weak, soft, and/or different. This theme is also reflected with Protudjer, Kozyrskyj, Becker, and Marchessault (2009) research, which depicted that as a pre-emptive measure some school students with breathing issues sign up for less strenuous sport activities, to avoid the social fallout. Additionally, the view held by a minority of participants in this current study that asthmatics cannot successfully accomplish non-asthmatic athletic roles may have an influence on participation choice and expectation. Pascoe's (2003) study of 20 teenage boys in America indicated that there is a social hierarchy within most high schools, which can influence a teenage boy's social acceptance. Pascoe refers to Jocks who are a group of boys who are associated with a dominant form of masculinity; they are successful at sport and have the highest social status and popularity in school. However, not all boys, and especially asthmatics may easily engage or participate in sports; these boys may have difficulty feeling a sense of social acceptance from their more athletic peers (Jocks) which may affect the development of friendships and perceived loneliness.

Pascoe's (2003) research interviews revealed that athleticism and sports are principle markers of masculinity and being seen by others and by oneself as masculine is central to being a boy in high school. In this study, Justin rationalised that his friends with asthma were reluctant to participate in optional physical activity because it might increase the opportunity to marginalise and/or subordinate their identity as stereotypical 'normal' male. However, most participants in this study did want to participate in physical activity to maintain normality, but unpredictable asthmatic symptoms were viewed by most as a risk to their social identity. This theme corresponds with Bruzzese, Fisher, Lemp, and Warner (2009) and Letourneau et al.'s (2012) research among adolescents with asthma, where they noticed patterns of worry pertaining to peer perceptions and being viewed negatively, because of their asthma. To cope the majority of participants in this present study downplayed their asthma symptoms and/or did not use their asthma medication. Educators and adults in role model positions can offer a positive influence by

demonstrating their understanding of how asthma can unpredictably affect student participation and incorporate an ethic of care. Physical Education teachers' consistent and empathetic responses to asthma signs and symptoms exhibited by students could limit and minimise the negative experiences of physical activity and support healthy choices with positive long-term health benefits. It is important for educators and particularly Physical Education and Health teachers to not only promote and embrace healthy practices of males, but to challenge male students to unsettle structures that maintain hegemonic masculinity itself (e.g., the role of the Jock). Reconceptualising hegemonic masculinity within the classroom environment may increase the opportunity for boys with asthma to feel that their masculine identity is not threatened and/or challenged by participating in physical activity in a restricted capacity. In conclusion, many participants in this study wanted asthma discussed, but some of them were reluctant to seek external assistance. Asking for help could be viewed as a threat to their masculinity, therefore teachers and health care providers should not wait for males to approach them but instead lead and facilitate these discussions.

### **The influence of mothers on the healthcare seeking behaviours of adolescent males**

This section discusses in depth how parental informational and emotional support affects adolescent asthma management. Firstly, I illustrate that in previous research and in this study, that more mothers in comparison with fathers are involved in their children's healthcare. Secondly, I critically evaluate why the scenario of imbalanced involvement is pervasive and I seek to understand the potential barriers fathers face in their participation and delivery of informational and emotional support. Lastly, I discuss how mothers support their adolescent children's asthma management and in particular fulfilling the role of the 'alert assistant'.

In this study the majority of participants' explained that they were independently managing their asthma, however throughout the interviews most described how their mothers were actively involved in their asthma medication compliance. No participants in this study specifically mentioned their fathers in respect to support of their asthma medication compliance. As previous research has demonstrated, there is a longstanding tradition whereby women influence the health of men (Creighton & Oliffe, 2010). The influence of women on health care-seeking behaviours of males is consistent with Norcross, Ramirez, and Palinkas (1996) quantitative study that collated 314 questionnaires of American patients who attended family medicine clinics. Their results concluded that women exert an important influence on the decisions of males to seek health care, as males were 2.7 times more likely than women to be influenced to seek health care by a member of the opposite sex. Additionally, Lukenbill and Immroth's (2010) research

recognised that most boys relied on their mothers as the main source of health information. Ayala and colleagues (2006) research is congruent with this study and represented higher support for adolescent asthma management was acquired from mothers, (mothers 82% and fathers 36%). The reported preference of mothers' involvement in their son's asthma care identified in this study and others might be influenced by historical hegemonic masculine roles (e.g., practical, employment-related, and personal barriers to fatherhood and the construct that it is feminine to care for one's body) which may restrict fathers' involvement and delivery of informational and emotional support of their son's asthma.

Additionally, family dynamics are socially and culturally constructed which can confine the attributes expected of family members, with the mother portrayed as the main caregiver of their children and the father represented as the family provider and secondary caregiver to their children. This traditional gendered model supports the notion that fathers have only one role that matters, that of paid work and that any other roles are essentially optional (Lee & Owens, 2002). Subsequently, fatherhood has not been positioned as central to men's identities in the same way that motherhood is equated with adult womanhood (Lee & Owens, 2002). This might explain why some fathers have lacked confidence to accomplish parenting roles outside of the absent bread winner, because they were deemed to be places of female dominance and women were viewed as more successful due to their mothering instincts (Lee & Owens, 2002). However, some men within the twenty-first century are starting to challenge the normative roles expected of them and fulfilling multiple masculine roles, which include being stay at home fathers and providing emotional and nurturing roles to their children (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010). Gendered roles are changing, more females are in paid employment and fathers are emerging as just as vital and capable as women in nurturing roles (Grunwell, 2010; Farquhar, 2007; Toufexius, 1999). De Braal (2008) reported that in the United Kingdom up to one third of care given to the under-fives is now by fathers, however many fathers continue to identify primarily as the breadwinner, a role aligned with masculine ideals (Greaves, Oliffe, Ponc, Kelly, & Bottorff, 2010; Lee & Owens, 2002).

In this study, I observed that the nurturing maternal role and caring behaviours by mothers influenced their son's management of asthma and this theme is consistent within previous research (Ayala et al., 2006; Clark, 2012; Iley, 2007; Williams, 2000b). William's (2000b) qualitative study individually interviewed 40 British teenagers with asthma and diabetes, 20 of whom (10 males, 10 females) aged 15 to 18 were diagnosed with asthma. The parent most involved in facilitating the management of their teenager's chronic illness (asthma and diabetes) was also interviewed, and out of the 40 interviews, only one father was present.

Iley (2007) suggests from Williams' (2000b) research, that boys' mothers are willing to act as 'alert assistants' to enable their sons to pass as 'normal teenagers' instead of ones with a chronic illness. Creighton and Oliffe (2010) suggest this theme may occur because gendered divisions between domestic and public spheres anchored 'mothers' as the private caretakers of health for the men in their lives. The term 'alert assistant' was originally used by Charmaz (1991) referring to someone who helps with the management of stigma and self-presentation of chronic illness. Williams' (2000b) developed this concept in terms of gender and classified the role to identify and explore the skilled and often invisible work, which mothers of adolescent males with asthma carried out on behalf of their sons. It implies sensitivity to their son's wishes, including an awareness of how best to offer help to protect their sons from the vulnerability that can accompany asthma. The participants in this research desired independence with their asthma medication to maintain normality in front of their peers, especially in social settings (e.g., school). However the 'alert assistant' role was evident as the participants actually relied on their mothers behind the scenes (e.g., at home) for support and guidance to minimise disruption caused by their asthma. This was evident in Williams' (2000b) research as the majority of the teenage boys in her research managed their asthma and treatment privately, mainly at home augmented by maternal assistance. There is evidence to suggest that some adolescent males desire control and independence in public but abdicate responsibility for management of their asthma symptoms to their mothers in the home setting. This corresponds with Charmaz's (1995) research of men with chronic illnesses where she described how men who appeared independent in public spheres could transform themselves into dependent 'patients' at home.

In this study, the participants' mothers fulfilled the role of asthma educator and provided responsibility and supervision, reminding their sons to adhere to their asthma medication regime, and even telling their friends what to do in the event of an asthma attack. These themes were also present in Ayala and colleagues (2006) research, as some of their participants' mothers reminded them to bring their inhaler to school or to take their medicines before bed. The younger participants (12 to 14 years old) in this current study described higher dependence on their mothers than the older participants did. This trend might have occurred for a similar reason to some mothers in William's (2000b) study, where they assumed their sons were not ready for independent asthma management. This was evident in Ayala and colleagues (2006) study as one participant said, "My mom got more and more suspicious about it, because she kind of got mad at me because I won't tell her" (p. 210). Within the present study, approximately half of the participants described that once they gained control of their medication and symptoms they tended to become careless and slowly forgot to take their medication because they were confident they did not need their medication anymore, or as in Justin's case, he sometimes did not use his asthma inhalers because he could not be bothered.

Some participants' examples in this study were supported from participants' beliefs in Ayala et al. (2006) research as some reported that management behaviours were not needed because they had outgrown their asthma and/or it was not severe enough to warrant attention. Examples from both of these studies corroborate the experiences of mothers in Williams' (2000b) study where they did not generally trust their sons with independent medication compliance. Consequently, Williams' (2000b) said mothers felt they needed to act as 'alert assistants' because of their perceptions of the self-care abilities of their sons, and the gendered ways boys lived with asthma.

Informational and emotional support of mothers as the 'alert assistant' was influential in both Williams' (2000b) research and this study to support asthma medication compliance among the participants. For example, a 14 year old within this present study who identified support from his mother showed a comprehensive understanding and seemed in control of his asthma. In comparison, a 17 year old participant with apparent low support had a limited understanding of his asthma and prescribed medication regime. Rhee, Belyea, and Brasch (2010) articulated that these findings are mirrored in other studies with several researchers identifying family support as a critical factor in promoting asthma medication adherence in adolescence. For example, Rhee, Belyea, and Brasch's (2010) research of 126 American adolescents with asthma aged 13-20 years old highlighted the beneficial effects of family support in improving asthma outcomes in adolescence. Their research findings identified that higher levels of family support were associated with greater asthma adherence in adolescence. Family support reduced barriers concerning adolescents' negative attitudes toward medication and healthcare providers, which in turn improved asthma adherence. However, the research focused on family support denoting the role of mothers, fathers, brothers, sisters and so forth; consequently, it was unclear if and how much support was provided by the mothers and fathers. In conclusion, it is clear that family support predominantly provided by most mothers' fulfilling the 'alert assistant' role is imperative in improving adolescent asthma medication adherence. Within this study, it was evident that the majority of participants were dependent on their mothers in private home settings to support a treatment plan, maintain medication compliance, and symptom identification. However, fathers were seldom mentioned in this study and clarity around father's contribution to their sons' asthma medication management was not established. While in public settings, most participants explained they strived for independence hence limited their family involvement with their asthma management.



In summation of the social influences theme and sub-themes, it was evident that the media generally stigmatised and infrequently represented people with asthma. Most media representations of asthma gave most participants the impression that asthma was not a serious health condition, which may have contributed to certain participants underestimating the consequences of not adhering to their long-term asthma medication. When the media did portray people with asthma, they were mostly typified as nerdy, different, and inferior. The persuasive stigma reinforced by the media internally affected minority of participants to describe a negative asthmatic self-identity. However, the majority of participants described that the external stigma from their non-asthmatic peers had a low influence on their asthma management. Because most participants believed that the increasing commonality of asthma in New Zealand helped their peers to articulate that the media representations may not be factual depictions of people with asthma. Previous findings did not provide clear evidence if external peer pressure is an influence on adolescent asthma medication adherence, findings in this study indicated low external peer pressure on asthma medication adherence, which is at variance with some of the previous adolescent chronic illness research. The participant descriptions in this current study indicated that the increasing commonality of asthma in New Zealand increased social awareness and acceptance of people with asthma and thus minimised opportunities for experiences of explicit peer pressure.

Most participants wanted asthma education reinforced within high school; however, no participants described that asthma education was delivered by their teachers. Approximately half of the participants believed teachers were not sympathetic of students with asthma and that affected their ability to confide in teachers when asthmatic symptoms persisted. Previous research indicates that teachers generally have an inadequate understanding of asthma, which indicates the need for asthma education delivery to both teachers and students. The influence of peers with asthma and supervision from mothers was important to successfully support acceptance and management of participants' asthma. Having friends with asthma was important in providing a sense of normality and belonging for most participants. Supportive environments (e.g., home and school) were identified in this study as protective and enabling factors, which are vital to promote improved health outcomes for male adolescents diagnosed with asthma. Acceptance, belonging, and reducing the risk of isolation are key factors to maximise health and well-being outcomes for adolescent males with asthma. Adolescents are influenced by their peers and receptive to media information; positive role modelling and informed characterisations of asthmatics could promote further acceptance and awareness by society.

Within this next section, I will discuss the evolution of masculinities within New Zealand and how hegemonic masculinity replicated through a sporting environment can be both protective and detrimental to male adolescents' health. I will then conclude how masculinities influenced some male adolescents' interpretation and management of their asthma symptoms.

## **5.3 Masculinities**

Within the theme of 'masculinities', I discuss participants' interpretation of masculinities, including the masculine sporting culture that has evolved in New Zealand and I consider the influence of masculinities on participants' asthma symptom management.

### **5.3.1 Perceptions of masculinity**

This sub-theme identifies adolescent males' opinions around the values and attributes of a stereotypical male in New Zealand. I then discuss the pressures males may face in attaining the characteristics of a stereotypical New Zealand male, whilst observing that not all males desire or value these ideals. Evidence in this research suggests that the idealised image of the Pākehā male is being challenged.

New Zealanders of European descent (Pākehā's) have historically identified with a pioneering model of men who are generally resilient, self-reliant, tough, and muscular (Bannister, 2005; Phillips, 1987). This historical identity of the Pākehā male supports hegemonic ideals and has been reinforced through families, cultures, media, sport, and education (Duley, 1997; Ellis & Collings, 1997; Phillips, 1996). In this current study the majority of the participants reinforced these ideals and believed a stereotypical New Zealand male would play or watch rugby and should have qualities associated with the socially dominant and idealised form of hegemonic masculinity (e.g., tall, athletic, resilient, and tough). These beliefs were also reinforced in O'Connor's (2002) study that investigated young men's conceptions of health, illness and health care. His sample included 60 Pākehā male participants aged between 15 and 24 years. O'Connor's findings showed that the participants who described an exemplar of men's health only ever identified male entities with hegemonic qualities of physical dominance, for example the All Blacks (New Zealand Rugby Team) or an elite sportsman. It is important to consider that O'Connor's study and this current study were ethnically Pākehā dominant, which may have influenced the reinforcement of a stereotypical Pākehā male with hegemonic qualities. In addition, Park's (2000) article illustrated an analysis of 700 entries in an art competition for New Zealand children in which they depicted the person they most admired. The results showed

that after family members the most common depiction for boys was an All Black. In contrast, the most admired person for girls was a friend. Stereotypical perceptions of what a male should look like were also reinforced in Drummond and Drummond's (2010) study of 89 Australian males aged 5-12 years. Their participants perceived that males should be highly muscular given that males have to engage in 'tough' sports and males have to be strong. Being strong was a definition of being male in the eyes of these participants and reflected what they considered was a healthy male. These studies help support the idea that a fair proportion of males in New Zealand and Australia value the rugby-playing, stoic, physically strong, and skilled male.

Phillips (1996) and Courtenay (2011) depicted that males in New Zealand and North America are at risk of bullying or feeling pressured to adopt hegemonic beliefs (e.g., toughness and competitiveness). This was evident in Weaver's (2001) survey of the thoughts and views of 50 teenage New Zealand boys aged 13 to 17 years, which illustrated several boys reported having been bullied or felt pressured to be tough and competitive. In contrast to Weaver's (2001) study none of the participants' in this current study specifically mentioned they felt external peer pressure to be tough and competitive; however a few gave examples of coaches and teachers pressuring them to compete in sports. The participants' comments suggested that they displayed self-driven behaviour of 'toughening up' to fit in and achieve a sense of belonging. This was also evident in Rhee, Wenzel, and Steeves's (2007) study in which they identified 'toughening' as a coping mechanism that adolescent males especially used to downplay their asthma symptoms and push themselves beyond their physical limitations to portray themselves as capable as their non-asthmatic peers. In addition, most participants 'toughened up' in this current study because they did not want to be perceived as abnormal or be associated with inferior masculine qualities that are often stigmatised with asthmatics (e.g., dependent, nerdy, soft, and weak). In Weaver's (2001) study a few male participants mentioned that the weaker ones, the so called geeks, were teased and bullied, correspondingly a small minority of participants in this present study 'toughened up' in certain situations to avoid being teased and/or bullied. Similarly, most participants in this study felt pressured to demonstrate their masculine qualities via competitive sport and consequently some risked ignoring and/or downplaying their asthma symptoms to achieve these qualities. A participant in this study experienced EIA symptoms which he consciously chose to ignore in preference to achieving his athletic goal. It is important for health providers and parents to recognise that many adolescent males' value being physically competitive and as a consequence some can risk downplaying symptoms or keeping silent about their asthma to remain competitive, which has the potential to place them at serious risk of poor asthma management and compromised health outcomes.

Findings in O'Connor (2002) and this study showed that every participant identified the physical dimension of health as important. In this current study, achieving physical potential was vital to most participants and their compromised participation in sport compared with non-asthmatics was a significant frustration. O'Connor (2002) said this is reflected in men's conceptions regarding health and the importance of being physically active. He also suggested most males appeared to be influenced by the activities that other men practise, compared to their own potential to practise those activities. Potential and actual achievement comparisons was a frustration for most participants in this current study as they could not identify themselves with and/or believe they could achieve the same desired hegemonic masculine qualities (e.g., physical strength and endurance) as non-asthmatic male peers. O'Connor (2002) stated that Pākehā masculinities do not value male bodies and practices that cannot take heavy knocks or deliver massive amounts of power and stamina. EIA symptoms can unpredictably affect a male adolescent's capacity to maintain high levels of physical endurance, which is a influencing factor affecting most participants' interpretation that males with asthma have a marginalised and/or subordinate masculine identity (e.g., physically soft and/or weak). To reaffirm their masculinity most participants amplified their risk-taking by not using preventive asthma medication and/or downplaying their asthma symptoms in social settings. Other participants' responses suggested that being an asthmatic compromises perceived masculine qualities because an asthmatic male cannot be categorised within the most dominant form of masculinity. This belief affected approximately half of the participants' confidence to aspire to occupations deemed socially suitable for non-asthmatic males (e.g., builder, farmer, fire fighter, and/or sports professional). Similar feelings were described by O'Connor (2002) in reference to chronic illness sufferers, he said they perceive themselves as not realistically being able to practice some activities and may exclude these from the ideal level they perceive themselves attaining. These intrinsic beliefs may arise because having a chronic illness can reduce a man's status in masculine hierarchies and raise their self-doubts about masculinity (Charmaz, 1995; Courtenay, 2011). Hence, some asthmatic participants in this study, and some chronic illness sufferers described in O'Connor's (2002) study had difficulties in developing a respected masculine identity.

Not all males desire the dominant form of masculinity and two participants in this study challenged the historically presumed universal masculinity. Within the twenty-first century, these participants are maturing in a society that is encompassing debate both privately and publicly allowing for new and varied ways of being a man (Pascoe, 2003). Men are fulfilling roles outside the accepted norms of manhood (e.g., childcare, nurses, and dancers) and women are actively participating in roles that were formally exclusive to men (e.g., police officer, fire fighter, doctor, and sports professional). Gender roles and expressions of masculinity are

evolving and broadening; for example, the All Blacks are no longer solely depicted as narrow caricatures of traditional masculinity. They have been portrayed in the media promoting mental health awareness campaigns, writing books promoting self-health responsibility and depicted in feminine magazines as caring parents (Pringle, 2002). Within this research two participants believed that males are diverse and can be represented in multiple forms of masculinity, they said, “everyone is different and its good” and “you should just be whoever you are”. Similar descriptions were also evident in Weaver’s (2001) study, one participant said “individuality is important” and another “it’s good to be different”. Both these studies observed that some male participants identified males as diverse and capable of instilling and experiencing more than just hegemonic ideals. In summary, this study suggests that the stereotypes that were available for males in the mid-late 1900s are still present and most participants are developing ideologies based on this traditional masculine stereotype. However, given that some participants were unsure or believed that there is not just one stereotype of a New Zealand male would suggest there are more socially accepted ways for males to act out and embody multiple masculine identities.

Under this sub-theme, I illustrated that participating and being competitive in sport was important to most participants’ masculine identities. A high percentage of male participants’ identified rugby players as embodying the ideal of men’s health in this study and other studies, which demonstrates rugby’s symbolic dominance within discourses of masculinity. Hence, in the next sub-theme I am going to critically analyse how masculinities in sport (particularly rugby) can affect the health and asthma management of adolescent males.

### **5.3.2 Masculinities in sport**

In this section, I explain how sport in New Zealand has historically been identified as important to males’ masculine identities, and then I discuss how sport can be both protective and detrimental to the health of adolescent males.

In this study, I identified sport as an important aspect to the majority of the participants’ masculine identity. Drummond (2002; 2003) articulated that historically sport was vital to males’ identity because sport provided opportunities for boys to evolve into men by demonstrating their manliness, courage, and strength on the sports field. Sport especially within the Western civilisation has been identified as significant in the development of a sociocultural identity for boys (Connell, 1995; Drummond, 2002; 2003). Within New Zealand, the primary sport that has helped shape boys into men was rugby (Park, 2000; Phillips, 1996; Pringle, 2002). In 1870, rugby was introduced into New Zealand, as a sport it was purported to promote character

building, enhance strength and self-control, which was representative of manhood in that era (Phillips, 1996). By the early 1900s rugby evolved as the ideal sporting medium to install manly characters in boys and develop their physical strength, subsequently rugby rapidly became compulsory for boys within the New Zealand school curriculum (Park, 2000). Rugby developed into New Zealand's national game and became central to men's national identity (Philips, 1996; Pringle, 2002). The game of rugby has instilled values, which embody much of the 'ideal' New Zealand male character, and this may have influenced the majority of the participants in the current study to refer to the All Blacks (rugby team) as examples of a stereotypical Pākehā male. Historically rugby has reinforced negative health outcomes for males as the constructs of the game and its environment has reinforced hegemonic masculine qualities and required males to be physically dominant, suppress emotions, and to overcome pain (Park, 2000; Philips, 1996). Pringle (2002) whose research indicated that the prevalence of rugby in New Zealand linked and glorified an influential way of being male with sporting prowess, demonstrating acts of violence, and tolerance of pain, further elaborated this. For instance, an All Black named Wayne Shelford was portrayed as invincible on and off the rugby field. In one rugby game Shelford lost four teeth and sustained a ripped scrotum but continued to play through the pain and subsequently a concussion compounded the initial injuries. Consequently it is established that rugby has helped produce a dominant discourse of masculinity which reinforces the view that 'real' males are tough, aggressive, physically superior to others, risk-takers, and competitive (O'Connor, 2002; Park, 2000; Philips, 1996; Pringle, 2002).

In contemporary society, the rugby culture is less constrictive and it has become more socially acceptable for rugby players to play fair, express their emotions, and receive medical attention for their injuries, even though there is still a hard man persona about being a rugby player (Pringle, 2002). For example, the same player I mentioned earlier Wayne Shelford has been labelled one of the toughest men to ever pull on the All Black jersey yet in 2012 he released a book called *Buck up, The Real Blokes Guide to Getting Healthy and Living Longer*. Shelford explained that after experiencing cancer he became pro-active and was concerned about the statistics for men's health, which prompted him to write a book encouraging men to front up and to begin to take care of their own health. In addition to Shelford, another famous All Black John Kirwan has become the face and embodiment of a mental health campaign. Kirwan promotes awareness and help-seeking behaviours to enhance mental wellbeing, both of these examples challenge historical gender stereotypes that idealise men as robust, autonomous, self-reliant, and emotionally invulnerable rather than concerned with self-health, illness, or injury prevention. The softer and rounder image of masculinities might explain why many participants in this study gave mostly positive examples of rugby that were protective of their health and asthma.

For instance, the environment of rugby encouraged ‘mateship’ and comradery between teammates. This sense of belonging and connectedness was beneficial for participants in this study, as they explained that informal settings like changing rooms before rugby practice were places that provided an environment where they felt comfortable to use and/or share their asthma medication. In addition, awareness that other rugby players also had asthma enabled them to relate, understand, and support each other with the unpredictable complications of asthma, which helped minimise isolation and the stigmatisation of being an asthmatic. It is encouraging that over one third of the participants felt safe to use their asthma medication in front of their peers however a few participants also mentioned they shared their asthma medication, which is not recommended as safe practice. Asthma medication is orally administered therefore sharing an asthma inhaler can lead to detrimental health outcomes (e.g., meningococcal meningitis). A minority of the participants reinforced historical detrimental qualities of rugby by describing the use of violence to deal with other players who mocked their asthmatic condition. In addition, most participants were prepared to downplay their asthmatic symptoms to possibly fulfil the sociocultural perception of the importance of men to be sports-oriented and participate fully in competitive sport. In summary, it was evident that sport, especially rugby provided opportunities for several of the participants to enact a variety of masculine ideals that were both protective and detrimental towards their asthma management. Drummond and Drummond (2010) elaborated that despite the emerging focus on masculinity, there has been a paucity of research specifically linking masculinity to physical health research. Therefore, in the remainder of this section I will critically analyse how masculinities within sport can be both protective and detrimental to adolescent males’ wellbeing and management of their asthma.

### **The negative impact of sport on adolescent males’ health and asthma management**

It is important for researchers to consider the influences of sport to understand how the sporting environment may affect healthy lifestyle adoption and asthma management. Drummond (2002), reasons that the hegemonic masculine environment of many sports can perpetuate unhealthy attitudes and behaviours for most men. The longer a man can endure and withstand physical pain the greater the likelihood of his perceived heightened masculinity (Drummond, 2001). Courtenay (2000) explained the type of physical activity most males partake in can be risk-taking and dangerous to their health. For example, compared to women men are more likely to engage in infrequent, strenuous physical activity, which significantly increases men’s risk for heart and asthma attacks (Courtenay, 2011). Approximately one third of the participants in this current study provided examples of risk-taking by completing physical exercise to the point where they struggled to breathe. A few participants did not see physical exercise as risky or dangerous;

rather they perceived it as fun and challenging to push themselves physically to the limit. This was evident in Rhee, Wenzel, and Steeves's (2007) research as male participants in their study described they would toughen up by disregarding their asthma symptoms and by pushing themselves dangerously beyond their physical capacity. Similar themes were also portrayed in Drummond and Drummond's (2010) research as most of their male participants believed that males must play a sport that is tough and involves elements of risk (e.g., hitting, punching, or involving bloodshed). Enacting masculine strength, power, and disregard for danger on the sports field make such sports masculinised and therefore a worthwhile pursuit in which boys can engage in and prove one's manhood (Connell, 1995; Creighton & Oliffe, 2010; Drummond & Drummond, 2010). Consequently, some young men may complete physical risk taking activities, as they perceive that demonstrating aggression, strength, and risk taking as naturalised, promoted, and celebrated through social practices (Evans, Frank, Oliffe, & Gregory, 2011). These ideologies suggest that to engage in masculinised pursuits, males must place their body in an injurious situation and therefore risk their health, thus influencing participants to ignore or downplay their EIA symptoms. As the risk of downplaying asthma symptoms in a sporting context might help reinforce a respected masculine identity of being tough it may also risk serious health consequences (e.g., increase the risk of an asthma attack).

An adolescent male who is athletic does not necessarily need to prove his manhood, as being athletic is perceived as masculine (Creighton & Oliffe, 2010). However boys who have a chronic illness (e.g., asthma and haemophilia) are generally less physically capable and are at increased risk of being teased for not fitting the masculine characteristics socially expected of men, which can negatively impact on their self-perception and confidence (Swain, 2000). This was also evident in Park's (2000) study where she described that a school-aged boy with haemophilia was hassled by his mates for not playing rugby. In New Zealand participating in sport (particularly rugby) is valued and males who struggle to participate can have their sense of self pleasure and purpose affected and experience specific difficulties of fitting in, establishing friendship networks, and generally being accepted by their peers (Park, 2000; Wright, O'Flynn, & Macdonald, 2006). Generally, the participants in this current study did want to participate in physical activity, however on occasions participation was limited because of their asthma. Consequently, asthma reduced opportunities for social interactions, correspondingly many asthmatics in this study and other studies often felt different, isolated, and excluded from their peers (Bruzze et al., 2004; Letourneau et al., 2012). In addition, most asthmatic adolescents expressed fear and embarrassment about their illness being made public (Bruzze, Fisher, Lemp, & Warner, 2009; Couriel, 2003; Gibson, Henry, Vimpani, & Halliday, 1995; Rhee, Wenzel, & Steeves, 2007). Feeling embarrassed and/or worried about peers knowing about their



asthma is influenced by the media reinforcing undesirable attributes for people with asthma. Media portrayals of males with asthma have been generally associated with un-masculine qualities (e.g., nervousness, fearfulness, and physical incompetence) and may have contributed to why a minority of participants in this study feared embarrassment in relation to completing excessive exercise. A few participants worried if they expressed externally observable asthma symptoms (e.g., wheezing and asthma attack), they would be compared with the stereotype of male asthmatic (e.g., nerd and geek) consequently marginalising their masculine identity. The perceived risk of humiliation and being associated with un-masculine qualities may result in nondisclosure of their asthma medication and/or symptoms in a sporting environment. Therefore it is important for Physical Education teachers, coaches, and parents to encourage asthmatics to participate in a sporting context, and if EIA symptoms persist the teacher/coach should look at other ways to involve the asthmatic (e.g., refereeing, scoring, and/or modifying the physical intensity of the activity) to avoid asthmatics feeling embarrassed and/or excluded.

Haemophilia, like asthma, is an invisible chronic illness that can restrict participation in contact sports. Physically, asthmatics or haemophiliacs may appear 'normal' and may only present observable symptoms once the illness reacts (e.g., wheezing or more frequent and severe bleeds). In comparison with haemophiliacs most of the asthmatics in this study could and did participate in contact sports, however sometimes they could not participate to the same level as their non-asthmatic peers. Asthma symptoms, especially in the early stages may not be readily observable or understood and a few participants mentioned that they felt pressured by teachers and coaches to harden up and ignore their symptoms. This meant access to their inhalers in a timely fashion was limited and permission to have a break from practice/class if symptoms persisted was inconsistent. Only a minority described these situations however, it is still concerning that external pressures from role models influenced some adolescent males to enact hegemonic qualities to downplay or ignore their asthma symptoms which could have served health consequences. This external pressure might have transpired because of inadequate understanding of asthmatic or haemophiliac variances and restrictions to participation in contact sports. Insufficient education and understanding can enhance external pressure to participate in contact sport. Creighton and Oliffe (2010) stated that boys who perceive that they possess a marginalised masculinity might seek other risk taking activities to reaffirm their masculinity and prove their manhood (e.g., substance abuse and violence). This was evident in Pascoe's (2003) study of 20 teenage boys in America. Her findings illustrated that when sport was not an option for her participants, some drew on other masculine traits (e.g., heteronormativity or dominance), to compensate for what they lacked in claims on masculinity through sports. Contesting subordinate status is common for most adolescent males as they desire the respect of their fellow peers and

this was achieved in this current study by competing against other males through a sporting context to demonstrate their dominant masculine status. For instance, Wade said he would smash anyone in rugby who mocked his asthma and Andrew's intrinsic motivation for athletics was he did not want one of his peers to be better than him, he wanted to dominate.

These descriptions were also evident in Pascoe's (2003) study, some of her male participants mentioned that they desired other male peers to respect them and they worked hard to be able to do everything better than someone else. Pascoe's findings showed that not each boy is enacting a different type of masculinity but, instead, that they are attempting to infuse their own identity with recognisably hegemonic masculine characteristics (e.g., dominance, competition, and toughness). Boys who appeared less masculine (e.g., goths and nerds) in her study still attempted to maintain or create a sense of self as recognisably masculine to themselves and others.

For instance, one participant who identified as a Bogan (someone who listens to heavy metal music, wears jeans, and black t-shirts) claimed a piece of masculine identity for himself by comparing football to wrestling in terms of dominance and by feminising the boys on the track team as wimpy. In this current study, the majority of the participants gave descriptions reinforcing their masculine identity through the context of sport. However being an asthmatic can unpredictably affect their athleticism, which was frustrating for most participants as it was more challenging to possess and reaffirm a dominant masculine identity. Being seen by others and by oneself as masculine is central to being an adolescent male and sport provides a way to assert a masculine self. Consequently, the majority of participants in this study risked downplaying their asthma symptoms in a sporting context to appear physically competent to their peers and others in an attempt to pass as 'normal' and to prove their manhood.

### **The positive impact of sport on adolescent males' health and asthma management**

The powerful influence of the hegemonic masculinity culture can be reinforced within a sporting context, but does not necessarily always equate negatively for men's health. As explained earlier in this section, historically, rugby has been perceived as detrimental to the health of males, however findings in this study suggest that rugby was generally protective of the participants health and asthma management. Hegemonic qualities of being strong, muscular, and competitive were described negatively in the last section however; these qualities can also be protective of male's health and can encourage males to participate in regular physical activity which provides opportunities for men to lead health promoting lifestyles. Subsequently, physical activity is a health promoting behaviour that males have been reported to engage in generally more than females (Lee & Owens, 2002; McKinlay, 2005; Sloan, Gough, & Conner, 2010; Welsh, Robinson, & Lindman, 1998; Williams 2000a). Some males with chronic illnesses positively

utilise masculine qualities of independence and competitiveness to be physically fit and strong which can be protective of their chronic illnesses. This was evident in William's (2000a) research where boys with asthma and diabetes were more likely than girls to use physical activity to help their chronic illness. For example, the boys with diabetes used exercise to help control their blood sugar levels in contrast to many of the girls, who tended to self-administer more insulin. Correspondingly, in Miller, Willis, and Wyn's (1993) research on young people with cystic fibrosis many of the boys interviewed were engaged in considerable amounts of exercise, which benefited their condition. Miller, Willis, and Wyn (1993) believed the importance of sport and exercise to the social construction of masculinities was one of the main reasons why more boys than girls with cystic fibrosis participated in physical exercise. Similar themes were present in this current study as most asthmatic males focused their healthy behaviours around physical activity and it was the preferred form of health-promoting practice because they identified sport as important to their masculine identity.

The attributes a male can attain from regular physical activity are important in constructing and reconstructing masculine identities. This was reflected when one third of the participants mentioned that living a healthy lifestyle can be masculine from the perspective of being independent beings that are physically fit and strong. The majority of the participants believed that regular physical activity was the main way to keep healthy and assumed if one kept physically fit their asthma symptoms would improve. Other dimensions of health (e.g., spiritual and mental) were not identified or discussed by the participants as important to support positive health outcomes, as physical well-being dominated most participants' responses. This was evident in Drummond and Drummond's (2010) research when participants were asked about their physical activity, nutrition, and health. The majority of their participants limited their discussion to stereotypical masculine perspectives around sport such as rugby or cricket. This was further supported in O'Connor's (2002) study where he posed the question to 60 Pākehā males aged 15-24 years, asking what the word health meant to them. Every respondent recognised that the physical dimension of health was important, for example, one participant said he saw health as physical fitness. However, some participants in his study observed health from a more holistic concept and in combination with physical health; mental and/or spiritual well-being was included. O'Connor elaborated that 59 of the 60 respondents said their own lived experiences were the most important influences in their learning about health and illness. The participants in this current study were generally younger than O'Connor's participants were and consequently may have had less lived health experiences, thus limiting their conceptions of health. It is also important to consider why the participants did not discuss mental or spiritual well-being; this may be because in comparison with physical well-being these dimensions of

health are historically perceived as feminine health-caring practices. Physical well-being was desirable for most participants in this study as physical fitness can minimise EIA symptoms and correspondingly allow more participation in physical activities, which may decrease isolation and feeling abnormal from their peers. Sport also provided opportunities for the participants to build personal masculine qualities of being self-confident, independent, competitive, and athletic, which encouraged them to live a physically healthy lifestyle. These descriptions were mirrored in Pascoe's (2003) study as some participants mentioned that sport gave them a sense of confidence and team sports provided a family environment where they felt included and valued. In this current study team sports was also beneficial and helped some participants discover other asthmatic peers, which supported them to feel more valued and less isolated. This evidence would suggest that physical activity could have a multitude of holistic health benefits for males and especially males with chronic illnesses. As the participants explained in this research there are negative aspects of sport, but the positives appear to outweigh the negatives. Holistic and varied masculine ideals should be encouraged and allowed in sport, as reinforcing the dominant universal masculinity which generally embodies risky and detrimental behaviours towards the health of males is limiting and restrictive.

In summation, the hegemonic masculine environment of physical activity may affect healthy and/or unhealthy attitudes and behaviours of adolescent males. The influence of sport can affect adolescent males' self-esteem, self-image, and masculine perception. Being capable of physical activity is associated with their identity as young men and is the favoured health-promoting practice. Being physically active enables adolescent males to pass as 'normal' and accomplish masculine roles (e.g., self-sufficiency) through feeling in control of their body and their asthmatic condition. However, sometimes when participants participated in physical activity asthma unpredictably threatened their masculine identity of self-control and independence. Correspondingly, most males were frustrated and responded by downplaying or ignoring their asthma symptoms to pass as 'normal' and to maintain a respected masculine identity.

### **5.3.3 The influence of masculinities on adherence to asthma treatment**

Nearly half of the participants in this study believed males might find it more difficult to seek help for their asthmatic condition in comparison with females. This may be because most boys are socialised to embody hegemonic masculinity and 'take it like a man' from an early age, and they are discouraged from showing feelings of vulnerability and/or weakness (Boom & Tovey, 2009; Courtenay, 2011; Evans, Frank, Oliffe, & Gregory, 2011; Lee & Owens, 2002; O'Connor, 2002). The social expectation of boys to be tough and independent may lead to the suppression

of emotion, social isolation, and resistance to ask for help (Boom & Tovey, 2009; Evans, Frank, Oliffe, & Gregory, 2011). Raeburn and Sidaway (1995) argue that an inability to express a need for help are effects of stoicism and ‘toughing it out’ for which men are traditionally respected for in New Zealand. This was evident in this present study and stoicism underlined many of the participants’ reluctance towards managing their asthma in a health-promoting manner.

For example, half the participants in this study were initially reluctant to share that they had asthma or were experiencing minor symptoms, and would only speak out once more serious symptoms were experienced. Most did not want to complain, be treated differently, or waste the time of a health professional with issues that were not severe. Seeking help for minor asthma issues could threaten their masculine image and consequently form a barrier for some males as they endeavoured to determine if their condition was severe enough to warrant help for their asthma. Consequently, primary/preventative health was not a familiar concept; secondary/reactive health care was most participants’ expectation when asthma symptoms dictated that health professional intervention was required.

These findings were mirrored in Rhee, Wenzel, and Steeves’s (2007) study of 19 American adolescents with asthma aged 12 to 18 years. Their findings also showed that their participants, especially males, apparently downplayed symptoms and denied any serious impact of asthma on their lives. An example of these findings was present in Ayala and colleagues (2006) research when a participant said he would not tell his mother about his asthma, because he did not really face his asthma complications himself until he could not breathe at all. Similar themes were also present in O’Connor’s (2002) study when some male participants aged 15-24 explained they would make an effort to ignore symptoms when they felt unwell and would tell themselves to get over their sickness. These behaviours were influenced by the belief that males were tough and did not want to look feminine by engaging in health care practices. These reactive patterns of avoiding preventative health have been explored by Sloan, Gough, and Conner (2010) and support the notion that some males can be reluctant to seek preventive health care because of their self-perception that such behaviours are feminine. Sloan, Gough, and Conner illustrated that when men engaged in health-promoting practices they tended to downgrade the relevance of their health concerns to frame their health behaviours in ways that maintain hegemonic masculine qualities of being dependent and self-reliant. These representations of males being ‘tough’ and ‘self-reliant’ rather than concerned with self-health, illness, or injury prevention influenced most participants’ help-seeking behaviour in this study. As a result, a few participants experienced exacerbation of their asthmatic symptoms and consequently needed to seek urgent healthcare and increased medication to relieve the symptoms.

Reactive behaviour patterns were also evident in their medication maintenance, as most participants in this study relied reactively on their Ventolin inhaler to relieve symptoms. This was in response to most participants' beliefs that asthma was not a big deal and they were growing out of it; therefore, they no longer needed regular preventive medication. These findings were also apparent within Williams (2000a) report where 7 out of the 10 boys with asthma believed they were growing out of it, and no longer needed regular preventive medicine. Williams also identified that boys choose to use reliever inhalers when asthma symptoms presented rather than using regular preventive inhalers in an attempt to hide their asthma, even though this could be potentially harmful. In this current study at least half the participants did at times hide their asthma medication and viewed taking preventive medicine negatively, these descriptions are also mentioned in Williams's (2000a) study which noted that male's find taking responsibility and caring of one's body aligns with feminine qualities and may threaten their place in masculine hierarchies. When participants did mention they used asthma medication, they mostly used a Ventolin inhaler for the potential instant benefits of increased lung function and improved ability for physical exertion while playing sport, instead of using long-term medication on regular basis to care for their own health. These participants viewed their medication care from the perspective to represent or demonstrate a masculine identity. In summation, hegemonic representations of males being 'tough' and 'self-reliant' influenced most participants to downplay their asthma symptoms and resulted in many participants describing low levels of health-promoting and help-seeking behaviours.

In conclusion of the masculinities theme and sub-themes, there is evidence to suggest that most males believed that a stereotypical New Zealand male should have qualities associated with the socially dominant and idealised form of hegemonic masculinity (e.g., athletic, resilient, and tough). These qualities were mainly constructed and reinforced through a sporting environment hence participation in sport was vital to most males' masculine identity. However at times it was difficult for males with asthma to participate and/or contribute to the same level as their non-asthmatic peers in sport. Consequently, most participants positioned themselves with a subordinate and/or marginalised masculine identity and felt different, isolated, and excluded from their non-asthmatic peers. The majority of participants sought to challenge their marginalised masculinity with their peers through the context of sport, which occasionally resulted in downplaying their asthma symptoms. However, hegemonic masculine traits were also protective of some participants' asthma, as qualities of self-confidence, resilience, independence, competitiveness, and athleticism encouraged most participants to live a physically healthy lifestyle, which can help control and minimise the incidence of asthma symptoms. Nearly all of the participants reflected the historical desire to fulfil conventional 'unhealthy' masculine

positions and described reactive, non-help seeking behaviours, and minimisation of their asthma symptoms. Over half of the participants' were reactive and/or did not seek help for their asthma because they believed seeking health care was feminine and if they sought health care they risked being treated differently by others. Maintaining masculine ideals and normality in front of peers were driving factors in most participants' downplaying their asthma symptoms and/or not seeking help for their asthma. In contemporary society, it is becoming more socially acceptable for males to accomplish a diversity of non-traditional masculine characteristics. This was evident in this study, as not all participants' believed males should adopt hegemonic ideals and a minority of the participants' illustrated positive examples of managing and/or seeking help for their asthma. Throughout this study, I have illustrated that males are diverse and adopt a variety of masculine ideals that can be both protective and detrimental to their health and asthma management.

## **5.4 Recommendations**

Based on the literature review and the findings from this study I have observed insufficiencies and barriers within the media and the school environment that could be addressed and/or improved to support adolescent males to manage their asthma. Building on the research findings, I have put forth seven recommendations towards improving the experiences of male adolescents with asthma within New Zealand.

### **1) Counteract media stigmatisation of asthmatics**

To minimise the media stigmatisation of people with asthma described by most participants, the media need to be made aware of the current media reinforced stereotypes of people with asthma (e.g., nerdy and wimpy) and be encouraged to reduce the negative content by screening television shows which portray individuals with asthma in a positive way. Diverse and positive media representations of characters that have asthma would be supportive of male adolescents with asthma accomplishing perceived non-asthmatic masculine roles (e.g., professional athlete, building, and farming). In addition it would provide an opportunity to deliver stigma-countering information to self, others, and society, which could potentially increase awareness and decrease isolation of adolescents with asthma.

### **2) Utilise sporting role models who have asthma**

The majority of the participants described a significant consequence of living with asthma was the impact it had on sport. As most described the importance of sport to their self-identification, consequently some concealed and/or minimised their asthma symptoms to maintain their

sporting prowess. Therefore, it is crucial to publicise sporting role models who have asthma to explain their asthma management strategies and how they achieve their sporting goals, which would support informed asthma management decisions while being involved in sport.

### **3) Implement television advertisements to deliver asthma education**

Nearly half of the participants recollected asthma information from television advertisements, which suggests health-promoting television advertisements could be a viable communication medium to provide information on asthma for adolescent males and their peers.

### **4) Increase the awareness of the commonality of asthma in New Zealand**

Most participants described how asthma diagnosis is increasing in New Zealand and some participants felt the commonality gave them a sense of normality. The Asthma Foundation and health promotion organisations may wish to consider highlighting the incidence of asthma in New Zealand to increase social acceptance/awareness of people with asthma. The Asthma Foundation New Zealand have previously shown a television advertisement in which a child holding a balloon says, “1 in 4 kids can’t fill these”, this is a good example of delivering a simple and powerful message.

### **5) Implement peer support groups in high school**

Throughout this study, I have highlighted that most participants placed high value on the support of peers who also had asthma. Therefore, it would be beneficial for high schools to consider encouraging teachers with the appropriate asthma knowledge to implement asthmatic support groups where students can go for informational and emotional support to provide a sense of normality and belonging and to minimise loneliness and isolation.

### **6) Incorporate asthma education within the health curriculum**

Over half the participants in this study expected asthma education to be reinforced in high school, however not one of them mentioned asthma was specifically covered by their health teacher/s. Asthma education needs to be consistent and reinforced in high school as inadequate health literacy is a barrier to lifelong asthma management.

Providing asthma support through peer support groups and within the health curriculum is vital for this demographic as increased informational and emotional support reported by participants within this study was associated with increased utilisation of long-term asthma medication. Additionally, some participants wanted asthma discussed at high school but conversely they were reluctant to seek external assistance as asking for help could be viewed as a threat to their



masculinity and/or normality. Therefore, teachers and health care providers should not wait for males to approach them but instead lead and facilitate these discussions.

### **7) Increase teachers' knowledge on prevention and treatment of asthma**

As recognised from this, study and previous research teachers may be ill prepared to support students with asthma, especially EIA. Most teachers' limited understanding and knowledge of asthma affected some participants' confidence to fully participate in class activities and to confide with teachers when asthma symptoms were experienced. Educating and informing teachers' especially Physical Education teachers to be consistent and empathetic in response to asthma signs and symptoms exhibited by adolescents could limit and minimise the negative experiences of physical activity and support healthy choices and positive health outcomes.

## **5.5 Suggestions for further research**

Based on the research findings I have generated five suggestions to support improved understanding of male adolescents' experiences with asthma within New Zealand.

- 1) A larger qualitative study throughout New Zealand to investigate further how male adolescents' experience, understand, and manage their asthma symptoms. Regional variances throughout New Zealand need to be explored and may depict different masculine cultures and influences, which could affect male adolescent asthma management.
- 2) In this study, I discovered no coherent evidence to suggest that external peer pressure influences adolescent asthma management. Most previous research has focused on other chronic illnesses and findings were generalised to include asthma as well as other chronic illness. Additional research is required to examine the extent to which external peer pressure is an influence on adolescent asthma management, for males and females as separate entities.
- 3) Further research is needed to explore the asthma medication compliance rates of adolescent males especially when they leave home, to identify if the 'alert assistant' role prepares or further delays independence of asthma self-care.
- 4) Research on a larger scale to capture data from adolescent males with asthma who do not have a female caregiver to support them and act as an 'alert assistant' to further investigate the plausibility of the health protecting influences of female caregivers on asthma medication compliance.
- 5) Previous research has documented that stigma and stereotyping of asthmatics can be detrimental to treatment adherence, yet there is limited research specifically examining the

impact of stigma on people living with asthma. Therefore, it would be beneficial for further research to test the extent to which stigma and stereotyping influences asthma medication adherence.

## **5.6 Strengths and limitations of the study**

As with all studies, this study has strengths and limitations. A limitation of this study is that it was conducted following the major earthquakes in Christchurch, which made data collection difficult because high schools had been closed, moved, and/or merged because of the earthquakes. The staff at the schools that were open were stressed with increased workloads due to earthquake complications and understandably most did not have time or the capacity to participate in this study. In spite of these challenges, I have completed a qualitative study, which is rich in detail and provides an insight into New Zealand adolescent males' individual asthma management processes. A strength of this study was that participants were recruited from three different types of high schools, state funded, special character, and 'state integrated' based on religion. Additionally the schools were diverse as two were co-educational while the other was a single-sex school; the schools also differed in geographical location with two schools based in the city while the other was rural. These schools enabled a variety of ethnically diverse participants (e.g., Pākehā, Dutch, Samoan, South African, and Māori) which provided a broad representation of the male adolescent demographic throughout Christchurch. However, it is important to consider that sampling bias may have occurred in this study because most of the nominated recruiting teachers were actively involved within sport at high school and may have influenced the sample selection by drawing participants from sporting backgrounds. Subsequently it may be argued that less physically active members of this population were not equally represented in this study and if included may have influenced the results.

A limitation of the participating high schools was they represented average or higher socio-economic deciles, which may have affected the socio-economic diversity of participants. Most of the collected data was from adolescent males who came from an educated and affluent background and had a parent in a health related occupation or were encouraging of healthy behaviours. The incentive of a prize was a potential motivator for all participants to participate, however some of these participants were superficially motivated and less interested in their asthma, which may have affected the length of the interview time and reliability and depth of their responses. Data collection was from participants who attended high school therefore the data does not include the most vulnerable and possibly less educated adolescents whom have already left high school. The studied population was collected from one main city in New

Zealand (Christchurch) and masculine cultures may vary throughout New Zealand impacting differently on the male adolescents' interpretations and management of their asthma symptoms. Consequently, I am not able to generalise the findings of this study to larger populations of adolescent males in New Zealand. The participants may have experienced certain situations (e.g., external peer pressure and teasing); however, they could have been reticent to share the sensitive information with a stranger and their masculinity might have felt compromised by such a disclosure. Nevertheless, one of the key strengths of this research is that it is the first in New Zealand and possibly worldwide that has specifically investigated male adolescents' perceptions of masculinities and societal influences and how these understandings affect their interpretations and management of asthma symptoms. Accordingly, this study is significant as it supports improved recognition and understanding in a historically hard to reach and understudied population. Optimistically, this study will lead to further research, which would support an increase in male adolescents' asthma awareness, education, medication competency and improved control of their asthma symptoms. It is expected the information gained through completing this study will provide evidence for health providers, teachers, and coaches to consider masculinities and social influences when informing, educating, and supporting male adolescents' with asthma.

## **5.7 Conclusion**

Previous international studies have identified that most adolescents have poor asthma self-management skills and the occurrence of asthma is more common in adolescent males. However there is limited research that has investigated the societal and masculine influences on adolescent males' asthma management in New Zealand and worldwide with only a few published studies including both male and female perspectives. This study has contributed to narrowing this gap by reviewing relevant literature and exploring how male adolescents understand and manage their asthma symptoms. Given the insufficiency of information on male adolescent asthma medication compliance this study proposed the following research question: how do perceptions of masculinity influence asthma management of adolescent males? To help answer the research question I selected a qualitative descriptive study design to investigate the experiences of 15 male adolescents with asthma, exploring their perceptions of societal and masculine influences on their asthma management. This was accomplished by conducting individual semi-structured interviews with the participants, investigating questions about their perceptions of masculinity, asthma management, interpersonal relationships, and their physical wellbeing.

In answering the research question, most adolescent males in this study believed their asthma management could be affected by their perceptions of masculinity. For instance, it was found that physical restrictions of EIA symptoms could unpredictably affect their preference to be independent, strong, muscular, and competitive. Consequently, some participants described their masculine selves as marginalised and most provided examples of feeling different, isolated, and excluded from their non-asthmatic peers. To counteract these feelings and to maintain control and normality in front of peers the majority of participants occasionally downplayed their asthma symptoms and/or did not adhere to their prescribed treatment regimes. In addition, hegemonic representations of males being ‘tough’ and ‘self-reliant’ influenced some participants to downplay their asthma symptoms and resulted in participants describing low levels of health-promoting and help-seeking behaviours. However not all participants explained these adverse outcomes and a few resisted hegemonic ideals by taking care of their health and asthma management. Participants that described health-protecting behaviours usually had support from mothers and asthmatic peers. While participants who felt unsupported, generally presented hegemonic examples of being stoic and independent of their asthma management and tended to be more reluctant to use long-term preventive medication. Media representations also affected nearly half the participants’ long-term asthma medication use; because they gained the impression from media representations, that asthma was not a serious health condition. Throughout this study, I have depicted that males are diverse and adopt a variety of masculine ideals that can be both protective and detrimental to their health and asthma management. Acceptance, belonging, and reducing the risk of isolation are key factors to maximise health and well-being outcomes for adolescent males with asthma. Adolescents are influenced by their peers and receptive to media information; positive role modelling and informed characterisations of asthmatics could promote further acceptance and awareness by society.

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# Appendices

## Appendix A: Ethics approval



HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen  
Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

Ref: HEC 2012/181

28 January 2013

Mark Hamer  
Health Sciences Centre  
UNIVERSITY OF CANTERBURY

Dear Mark

The Human Ethics Committee advises that your research proposal “Adolescent men's perceptions of how they interpret and manage their asthma symptoms” has been considered and approved.

Please note that this approval is subject to the following:

- The incorporation of the amendments you have provided in your emails of 16 and 24 January 2013.
- You receiving provision registration from the New Zealand Teachers Council.

Best wishes for your project.

Yours sincerely

A handwritten signature in black ink, appearing to read 'L MacDonal'.

Lindsey MacDonald  
**Chair**  
*University of Canterbury Human Ethics Committee*

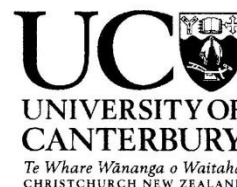
## Appendix B: Letter of information to principal

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490

Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



### Information Sheet for School Principal

#### **Male adolescents' perceptions of how they interpret and manage their asthma symptoms.**

**Principal Investigator:** Mark Hamer      **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

My name is Mark Hamer. I have a Bachelor's Degree in Education and a Graduate Diploma in Teaching and Learning (Secondary). I am now studying towards a Master of Health Science degree at the Health Sciences Centre at the University of Canterbury. I am seeking consent for your school to participate in this research study.

The aim of this study is to understand how adolescent males experience and manage their asthma symptoms.

Potential participants will be adolescent males (12-19 years old) who speak English fluently, attend High School and live in Christchurch, New Zealand.

#### **What will the participants be asked to do?**

The applicable student/s will be asked to participate in one individual interview with the principal investigator at the beginning of Term 1, February 2013. The interview/s will be organised in accordance with the school and held within school hours and on school premises in a confidential room. Parent/s or a nominated person is welcome to be present at the interview. The interview/s will take as long as required for the participant to feel they have shared as much information as they are comfortable with; this means interviews are usually around 25-40 minutes long. Participants and parent/caregiver/s will be required to complete and sign consent forms for participation in the study and for permission to audio tape the interview. Student/s participation is voluntary; they may choose not to answer any questions with which they are uncomfortable and they may withdraw themselves and any data they have provided at any time without having to give a reason. If they withdraw, I will do my best to remove any information relating to them, provided this is practically achievable. The participant can withdraw the data they have provided up until the point where their contribution is part of a larger body of work and/or submitted for publication or thesis exam. Their name and any personal details they provide will be kept strictly confidential. They will not be personally identified in any reports about the study without their prior permission.

**What questions will they be asked?**

Questions will be asked about what it's like to live with asthma, how much they know about asthma and how it affects them e.g. how long have you had asthma? What is asthma? Do you tell any of your friends you have asthma?

**What will happen to the information?**

The audio tapes will be transcribed by a professional transcriber, who will be required to sign a confidentiality form. The student/s will be given the opportunity to review the transcript of their interview. Then the audio tapes and transcribed data will be transferred to the principal researcher's computer, the data will be analysed by the principal researcher. No other persons will have access to the data which will be stored on the principal researcher's password protected computer. All study information will be securely kept at the Health Sciences Centre/University of Canterbury. Audio tapes will be destroyed after the study has finished, transcribed data will be stored for another 5 years in a locked drawer at the University of Canterbury.

**What will happen to the results of this study?**

A report of findings will be presented in fulfilment of the requirements for a Master of Health Science Thesis. The Thesis is a public document via the University of Canterbury library database. The participants will also receive a summary of the findings if they wish to do so. Findings may also be published or presented but they will not be personally identified in any publication or presentation.

**What are the risks and the benefits of the study?**

There is no apparent risk to the student/s. If they experience any mental stress or emotional distress during or after the interview I can make a referral/or the participant can go to the school counsellor / health teacher. They will have the opportunity to take breaks and also have the right to withdraw from the study at any time with no repercussions. The benefit of the study is that there is currently limited research on male adolescents' beliefs on asthma and their information can help health professionals gain an understanding of what is like to be an adolescent male living with asthma. An improved understanding of beliefs surrounding asthma will help equip and inform health organisations to create specifically targeted interventions and tailored support for male adolescents' with asthma.

**Who has reviewed this study?**

This proposal has been reviewed and approved by the Health Science Centre, University of Canterbury and the University of Canterbury Human Ethics Committee.

Approximately 15 participants are required for this study. The student/s will be notified confirmation of their place in the study and time/location of the interview via email. If for some reason the interview time is not applicable for them, they have the opportunity to email me back to rearrange a different time.

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)

**If you have any questions about the study at any stage you may contact me (principal investigator) and/or my supervisor**

Principal Investigator - Email: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz) Phone: 027 318 1118

Supervisor - Email: [jeffrey.gage@canterbury.ac.nz](mailto:jeffrey.gage@canterbury.ac.nz)

**Who do I contact if I have any concerns about this research?**

The Chair  
Human Ethics Committee  
Private Bag 4800  
Christchurch

Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

**Incentive for participation**

For participating in this study student/s will go into a prize draw to win a tablet computer. To be eligible for the draw they need to provide their contact details on the consent form (optional). On completion of all the interviews I will hold a draw for all the participants' entries and the winner will be emailed informing them that they have won a prize. I will then send the prize to their physical address.

**What is required of your school for this study?**

The approval to advertise the study through recruitment methods of: posters, daily notices and school newsletters within the school. Collaboration with a nominated health teacher and/or school counsellor to help provide information sheets/consent forms to potential participants, and to provide support (if needed) to students during or after the interview if they have any mental stress or emotional distress and organisation of interview room/s.

Can you now please complete the consent form if you agree for this study to take place on your premises and for your student/s to take part in the study within school hours. Please return the consent form electronically to the email address provided.

Thank you for your consideration of allowing your school and student/s to participate in this study

Yours sincerely

Mark Hamer

## Appendix C: Letter of information to parent / caregivers

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490

Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



### Information Sheet for Parent/Caregiver

#### Male adolescents' perceptions of how they interpret and manage their asthma symptoms.

**Principal Investigator:** Mark Hamer      **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

My name is Mark Hamer. I have a Bachelor's Degree in Education and a Graduate Diploma in Teaching and Learning (Secondary). I am now studying towards a Master of Health Science degree at the Health Sciences Centre at the University of Canterbury. I am seeking consent for your son to participate in this research study.

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Potential participants will be adolescent males (12-19 years old) who speak English fluently, attend High School and live in Christchurch, New Zealand.

#### What will the participants be asked to do?

Your son will be asked to participate in one individual interview with the principal investigator at the beginning of Term 1, February 2013. The interview will be held within school hours and on school premises in a confidential room. If you are not comfortable with your son being interviewed alone you or a nominated person is welcome to be present at the interview. The interview will take as long as required for your son to feel he has shared as much information as he is comfortable with; this means interviews are usually around 25-40 minutes long. Participant and parent/caregiver/s will be required to complete and sign consent forms for participation in the study and for permission to audio tape the interview. Your son's participation is voluntary; he may choose not to answer any questions with which he is uncomfortable with and he may withdraw himself and any data he has provided at any time without having to give a reason. If he withdraws, I will do my best to remove any information relating to your son, provided this is practically achievable. Your son can withdraw the data he has provided up until the point where his contribution is part of a larger body of work and/or submitted for publication or thesis exam. Your son's name and any personal details he provides will be kept strictly confidential. He will not be personally identified in any reports about the study without his prior permission.

**What questions will your son be asked?**

Questions will be asked about what it's like to live with asthma, how much he knows about asthma and how it affects him e.g. how long have you had asthma? What is asthma? Do you tell any of your friends you have asthma?

**What will happen to the information?**

The audio tapes will be transcribed by a professional transcriber, who will be required to sign a confidentiality form. Your son will be given the opportunity to review the transcript of his interview. Then the audio tapes and transcribed data will be transferred to the principal researcher's computer, the data will be analysed by the principal researcher. No other persons will have access to the data which will be stored on the principal researcher's password protected computer. All study information will be securely kept at the Health Sciences Centre/University of Canterbury. Audio tapes will be destroyed after the study has finished, transcribed data will be stored for another 5 years in a locked drawer at the University of Canterbury.

**What will happen to the results of this study?**

A report of findings will be presented in fulfilment of the requirements for a Master of Health Science Thesis. The Thesis is a public document via the University of Canterbury library database. Your son will also receive a summary of the findings if he wishes to do so. Findings may also be published or presented but he will not be personally identified in any publication or presentation.

**What are the risks and the benefits of the study?**

There is no apparent risk to your son. If he experiences any mental stress or emotional distress during or after the interview I can make a referral/or the participant can go to the school counsellor / health teacher. He will have the opportunity to take breaks and also have the right to withdraw from the study at any time with no repercussions. The benefit of the study is that there is currently limited research on male adolescents' beliefs on asthma and your son's information can help health professionals gain an understanding of what is like to be an adolescent male living with asthma. An improved understanding of beliefs surrounding asthma will help equip and inform health organisations to create specifically targeted interventions and tailored support for male adolescents' with asthma.

**Who has reviewed this study?**

This proposal has been reviewed and approved by the Health Science Centre, University of Canterbury and the University of Canterbury Human Ethics Committee.

Approximately 15 participants are required for this study. Your son will be notified confirmation of his place in the study and time/location of the interview via email. If for some reason the interview time is not applicable for your son, he has the opportunity to email me back to rearrange a different time.

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)



**If you have any questions about the study at any stage you may contact me (principal investigator) and/or my supervisor**

Principal investigator - Email: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz) Phone: 027 318 1118

Supervisor - Email: [jeffrey.gage@canterbury.ac.nz](mailto:jeffrey.gage@canterbury.ac.nz)

**Who do I contact if I have any concerns about this research?**

The Chair  
Human Ethics Committee  
Private Bag 4800  
Christchurch

Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

**Incentive for participation**

For participating in this study your son will go into a prize draw to win a tablet computer. To be eligible for the draw he needs to provide his contact details on the consent form (optional). On completion of all the interviews I will hold a draw for all the participants' entries and the winner will be emailed informing them that they have won a prize. I will then send the prize to their physical address.

Can you now please complete the consent form if you agree for your son to take part in the study. Please return the consent form either electronically to the email provided or by physically mailing the consent form using the provided pre-paid addressed envelope.

Thank you for your consideration of allowing your son to participate in this study

Yours sincerely

Mark Hamer

## Appendix D: Letter of information to participant

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490  
Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



## Participant Information Sheet

### Male adolescents' perceptions of how they interpret and manage their asthma symptoms.

**Principal Investigator:** Mark Hamer      **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

My name is Mark Hamer. I have a Bachelor's Degree in Education and a Graduate Diploma in Teaching and Learning (Secondary). I am now studying towards a Master of Health Science degree at the Health Sciences Centre at the University of Canterbury. I am seeking your consent to participate in this research study.

The aim of this study is to understand how you experience and manage your asthma symptoms.

You are invited to participate in this research study which involves one individual interview with the principal investigator.

#### Incentive for participation

For participating in this study you will go into a prize draw to win a tablet computer. To be eligible for the draw you need to provide your contact details on the consent form (optional). On completion of all the interviews I will hold a draw for all the participants' entries and the winner will be emailed informing them that they have won a prize. I will then send the prize to the winner's physical address.

#### What will I be asked to do?

You will be asked to participate in one individual interview with the principal investigator at the beginning of Term 1, February 2013, within your school hours and on school premises in a confidential room. If you are not comfortable with being interviewed alone your parent/s or a nominated person can accompany you for the interview. The interview will take as long as required for you to feel that you have shared as much information as you are comfortable with; this means interviews are usually around 25-40 minutes long. You and your parent/caregiver/s will be required to complete and sign consent forms for participation in the study and for permission to audio tape the interview. Your participation is voluntary; you may choose not to answer any questions with which you are uncomfortable and you may withdraw yourself and any data you have provided at any time without having to give a reason. If you withdraw, I will do my best to remove any information relating to you, provided this is practically achievable. You can withdraw the data you

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)

have provided up until the point where your contribution is part of a larger body of work and/or submitted for publication or thesis exam. Your name and any personal details you provide will be kept strictly confidential. You will not be personally identified in any reports about the study without your prior permission.

**What questions will you be asked?**

Questions will be asked about what it's like to live with asthma, how much you know about asthma and how it affects you e.g. how long have you had asthma? What is asthma? Do you tell any of your friends you have asthma?

**What will happen to the information?**

The audio tapes will be transcribed by a professional transcriber, who will be required to sign a confidentiality form. You will be given the opportunity to review the transcript of your interview. Then the audio tapes and transcribed data will be transferred to the principal researcher's computer, the data will be analysed by the principal researcher. No other persons will have access to the data which will be stored on the principal researcher's password protected computer. All study information will be securely kept at the Health Sciences Centre/University of Canterbury. Audio tapes will be destroyed after the study has finished, transcribed data will be stored for another 5 years in a locked drawer at the University of Canterbury.

**What will happen to the results of this study?**

A report of findings will be presented in fulfilment of the requirements for a Master of Health Science Thesis. The Thesis is a public document via the University of Canterbury library database. You will also receive a summary of the findings if you wish to do so. Findings may also be published or presented but you will not be personally identified in any publication or presentation.

**What are the risks and the benefits of the study?**

There is no apparent risk to you as a participant. If you experience any mental stress or emotional distress during or after the interview I can make a referral/or you can go to the school counsellor / health teacher. You will have the opportunity to take breaks and also have the right to withdraw from the study at any time with no repercussions. The benefit of the study is that there is currently limited research on male adolescents' beliefs on asthma and your information can help health professionals gain an understanding of what is like to be an adolescent male living with asthma. An improved understanding of beliefs surrounding asthma will help equip and inform health organisations to create specifically targeted interventions and tailored support for male adolescents' with asthma.

**Who has reviewed this study?**

This proposal has been reviewed and approved by the Health Science Centre, University of Canterbury and the University of Canterbury Human Ethics Committee.

**What do I do now?**

If you wish to participate please contact Mark Hamer by email:

**Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

Approximately 15 participants are required for this study. You will be notified confirmation of your place in the study and time/location of the interview via email. If for some reason the interview time is not applicable for you, you have the opportunity to email me back to rearrange a different time.

**If you have any questions about the study at any stage you may contact me (principal investigator) and/or my supervisor**

Principal investigator - Email: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz) Phone: 027 318 1118

Supervisor - Email: [jeffrey.gage@canterbury.ac.nz](mailto:jeffrey.gage@canterbury.ac.nz)

**Who do I contact if I have any concerns about this research?**

The Chair  
Human Ethics Committee  
Private Bag 4800  
Christchurch

Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

Can you now please complete the consent form if you agree to take part in the study. Please return the consent form either electronically to the email provided or by physically mailing the consent form using the provided pre-paid addressed envelope.

Thank you for your consideration of participation in this study

Yours sincerely

Mark Hamer

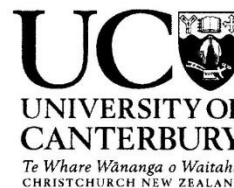
## Appendix E: Principal consent form

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490

Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



### Consent Form for School Principal

#### Male adolescents' perceptions of how they interpret and manage their asthma symptoms.

**Principal Investigator:** Mark Hamer

**Phone:** 027 318 1118 **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

(Please tick each box)

- ☐ I have read the information sheet and understand what will be required of the student/s if they participate in this project.
  - ☐ I understand that the interview will be held within school hours and on school premises and will be audio-taped.
  - ☐ I have read the information sheet and understand that all information collected will only be accessed by the researcher, his supervisors and a professional transcriber and that it will be kept confidential and secure.
  - ☐ I understand that neither the student/s, nor our school, will be identified in any presentations or publications that draw on this research.
  - ☐ I understand that student/s participation is voluntary and they may choose to withdraw at any time.  
*The participant can withdraw the data they have provided up until the point where their contribution is part of a larger body of work and/or submitted for publication or thesis exam.*
  - ☐ I understand that the student/s can receive a report on the findings of the study.
  - ☐ I understand that the following recruitment methods of posters, daily notices, and school newsletters might be used within the school premises for this study.
  - ☐ I understand that I can get more information about this project from the researcher, and that I can contact the University of Canterbury Ethics Committee if I have any complaints about the research.
  - ☐ I approve the association with a Health teacher in the school for organisation of recruitment and the use of interviewing room/s.
- I nominate the following Health teacher \_\_\_\_\_
- ☐ I agree for \_\_\_\_\_ (school name) to participate in this research.

**Signature** .....

**Date** .....

*Please return this consent form electronically to the email address provided above.*

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)

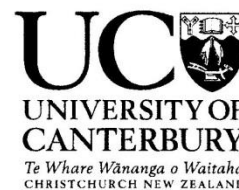
## Appendix F: Parent / caregiver consent form

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490

Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



### Consent Form for Parent/Caregiver

#### Male adolescents' perceptions of how they interpret and manage their asthma symptoms.

**Principal Investigator:** Mark Hamer    **Phone:** 027 318 1118    **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)    (Please tick each box)

- ☐ I have read the information sheet and understand what will be required of my son if they participate in this project.
- ☐ I understand that the interview will be held within school hours and on school premises and will be audio-taped.
- ☐ I understand that I or a nominated person is welcome to accompany my son at the interview.  
I or the nominated person wish to be present at the interview (YES / NO) nominated person \_\_\_\_\_
- ☐ I have read the information letter and understand that all information collected will only be accessed by the researcher, his supervisors and a professional transcriber and that it will be kept confidential and secure.
- ☐ I understand that neither my son, nor their school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my son's participation is voluntary and he may choose to withdraw at any time.  
*Your son can withdraw the data he has provided up until the point where his contribution is part of a larger body of work and or submitted for publication or thesis exam.*
- ☐ I understand that my son can receive a report on the findings of the study. I am aware that my son might have provided their email address on their consent form for the report to be sent to.
- ☐ I am aware that my son might have provided their physical address to be able to receive a prize if they are the winner of the prize draw.
- ☐ I understand that I can get more information about this project from the researcher, and that I can contact the University of Canterbury Ethics Committee if I have any complaints about the research.
- ☐ I confirm that my son is aged between (12-19 years old), speaks English fluently, attends High School, lives in Christchurch and has experienced asthmatic symptoms within the last year.
- ☐ I agree for my son to participate in this research and be interviewed alone in the event that I or a nominated person cannot be present.

**Signature** .....

**Date** .....

*Please return this consent form either electronically to the email address provided above or by physically mailing the consent form using the provided pre-paid addressed envelope.*

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)

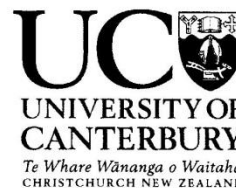
## Appendix G: Participant consent form

### Health Sciences Centre

2012

Tel: +64 3 364 2987, Fax: + 64 3 364 2490

Email: [healthsciences@canterbury.ac.nz](mailto:healthsciences@canterbury.ac.nz)



### Consent Form for Students

#### Male adolescents' perceptions of how they interpret and manage their asthma symptoms.

**Principal Investigator:** Mark Hamer    **Phone:** 027 318 1118    **Email:** [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

If you would like to go into the prize draw please provide your contact details below (optional). (Please tick each box)

- ☐ I have read the information sheet and understand what will be required of me if I participate in this project.
- ☐ I understand that the interview will be held within school hours and on school premises and will be audio-taped.
- ☐ I understand that my parent/s or a nominated person is able to accompany me at the interview.
- ☐ I have read the information letter and understand that all information collected will only be accessed by the researcher, his supervisors and a professional transcriber and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my participation is voluntary and I may choose to withdraw at any time.  
You can withdraw the data you have provided up until the point where your contribution is part of a larger body of work and/or submitted for publication or thesis exam.
- ☐ I understand that I can receive a report on the findings of the study. I have written my email address below for the report to be sent to.
- ☐ I understand that I can get more information about this project from the researcher, and that I can contact the University of Canterbury Ethics Committee if I have any complaints about the research.
- ☐ I agree to participate in this research and be interviewed alone in the event that my parent/s or a nominated person cannot be present.

Full Name (Student) ..... Email Address .....

Address for prize draw (optional) .....

Signature ..... Date .....

*Please return this consent form either electronically to the email address provided above or by physically mailing the consent form using the provided pre-paid addressed envelope.*

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)



## Appendix H: Recruitment poster





**UC**  
UNIVERSITY OF  
CANTERBURY  
*Te Whare Wānanga o Waitaha*  
CHRISTCHURCH NEW ZEALAND

### Are you a male aged between 12-18? and

### Do you have asthma?

- ♦ If so you have an opportunity to participate in a University of Canterbury research study.
- ♦ The aim of this study is to understand how you experience and manage your asthma.
- ♦ I am seeking approximately 15 participants to take part in the study that will involve one interview with the researcher.
- ♦ Each participant will have an opportunity to be in the draw for a tablet computer.

**For more details contact**

E-mail: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)

Or talk to

[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ) 

E-mail: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)  
[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

E-mail: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)  
[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

E-mail: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)  
[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

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[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

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[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

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[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)

E-mail: [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz)  
[www.facebook.com/BoysAsthmaNZ](http://www.facebook.com/BoysAsthmaNZ)



## **Appendix I: Individual interview semi-structured question schedule**

### **Introductory questions** *(To build rapport, will not be analysed)*

- What do you do for fun?
- What is your favourite television show at the moment? What do you enjoy about it?
- Identify a positive factor about your school environment.
- Do you like to participate or watch sporting events? Why/why not?

*I will then inform the participant that I'm going to start audio recording.*

### **Introductory statements**

- Can you please tell me what it is like to have asthma?
- How does asthma affect you?
- Do you take medications, and if so what do you take, how do you take it and when?
- Is there a time or a place you won't bring or use your medication?
  - If yes – Where? When? Why?
- What words do you associate with asthma?
  - In response to a word, can you tell me what you mean by the word you have described?

### **Participant's knowledge and understanding of asthma**

- What do you understand asthma is?
- What do you believe causes or triggers an asthma event for you?
- What do you believe helps to stop or prevent an asthma event?
- Where did you learn the most about asthma?

### **Masculine influences relating to asthma**

- What characteristics, qualities, attributes do you think a typical/ideal New Zealand man would have?
- From the qualities you have described of what a typical New Zealand man would be like, do you think asthma could affect any of these qualities? How?
- Could any of these qualities you have described affect your asthma management? How?
- Do you think it is more difficult for females, males or both to talk about and manage their asthma? Why?

### **Social impacts relating to asthma**

- Do you tell any of your friends that you have asthma? Why or why not?
- Do you think your friends and family understand what asthma is? Why or why not?
- Have you ever seen or heard about asthma on the television, radio, internet etc.?
  - If yes, where? Do you have any examples of words or messages?
- Have you ever hidden, downplayed or ignored your asthma symptoms?
  - If yes, why? Do you have any examples?
- If your asthma is causing you problems would you go to a doctor? If no, what are the barriers for you?

**Allow the participant the opportunity to add any information they want to add.**

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### **Appendix J: School notices/newsletter template**

Are you a male aged between 12 and 18? And do you have asthma? If so you have an opportunity to participate in a University of Canterbury research study. The aim of this study is to understand how you experience and manage your asthma. I am seeking approximately 15 participants to take part in the study that will involve one interview with the researcher. Each participant will have an opportunity to be in the draw for a tablet computer. For more details contact [mjh255@uclive.ac.nz](mailto:mjh255@uclive.ac.nz) or find me on Facebook (BoysAsthmaNZ).